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ABSTRACT

This collection contains 15 essays by teachers who participated in the First Annual Rural Alaska Instructional Improvement Academy in Fairbanks in May 1987. The essays were written as a follow-up to the academy, based on the teachers' reflections on their own experiences in rural schools as well as on the academy workshops they attended and on the four readings included in section 3 of this publication. The teachers were asked to write about either their own notions of the ideal schooling process for rural Alaska (section 1 of the essays) or what they considered to be an appropriate curriculum unit for village schools (section 2). Essays in section 1 discuss culturally relevant education for Alaska Natives; empowerment of communities, particularly Native villages with tribal governments; a process-oriented curriculum with a project-centered approach to experiential learning; school-community cooperation; parent-student involvement in activities strengthening different types of intelligence; community-based curriculum; obstacles to educational change; and cultural and multicultural education. In the second section, the essays on proposed curriculum units contain suggestions for: (1) use of rabbit snaring to teach kindergarten and first grade language arts; (2) implementing a senior research and writing project on jobs held by non-Natives in Native villages; (3) involving third graders in projects related to the Sister School Exchange Program and the Australaska Writing Project; (4) teaching Japanese culture to high school students using the movie "Ran"; and (5) teaching Japanese culture to elementary students through music. The teachers' background readings contained in the third and final section are the following: "The Axe Handle Academy: A Proposal for a Bioregional, Thematic Humanities Education" (Ron and Suzanne Scollon); "Culture, Community and the Curriculum" (Ray Barnhardt); "The Development of an Integrated Bilingual and Cross-Cultural Curriculum in an Arctic School District" (Helen Roberts); and "Weaving Curriculum Webs: The Structure of Nonlinear Curriculum" (Rebecca Corwin, George Hein, and Diane Levin). (SV)

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LESSONS TAUGHT
LESSONS LEARNED

Teachers' Reflections on Schooling In Rural Alaska

Edited by:
Ray Barnhardt
J. Kelly Tonsmeire

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Foreword

It is with great pleasure that we present this compilation of writing by rural Alaskan teachers. These writings were developed by teachers who attended the first Rural Alaska Instructional Improvement Academy, which was held on the University of Alaska Fairbanks campus from May 25 to June 5, 1987.

The Academy was sponsored by the Alaska Department of Education (Chapter I, Chapter II Block Grants, Educational Equity, Bilingual Education, Title II Math/Science); the University of Alaska Fairbanks; NEA-Alaska; the Fairbanks North Star Borough School District and sixteen rural school districts (Alaska Gateway, Bering Strait, Galena, Iditarod, Kenai, Kuspuk, Lake and Peninsula, Lower Kuskokwim, Lower Yukon, North Slope, Northwest Arctic, St. Mary's, Tanana, Yukon Flats, Yukon-Koyukuk, and Yupiit). Most of all we would like to express our appreciation to the Andrew W. Mellon Foundation and Council of Chief State School Officers for a grant that provided a major part of the funding for the Academy and this publication. We would particularly like to thank Rebecca Yount, our project officer, for her support. We would also like to acknowledge Helen Barrett of the Fairbanks North Star School District for all that she did to help ensure the program's success.

We are pleased to report that the Rural Alaska Instructional Improvement Academy has become an annual event. The Academy received a national award from the National Rural Education Association as well.

We would like to thank a group of student artists from McQueen School in Kivalina, Northwest Artic School District, for sharing their artwork with us. You'll find their work interspersed in the pages of this publication. Their names and the titles of their pieces are listed on the final page of this document.

J. Kelly Tonsmeire, Editor
Alaska Department of Education

Introduction

While there have been many reports over the years describing and analyzing schooling processes in rural Alaska, only rarely have we had an opportunity to see those processes through the eyes of the teacher. This collection of essays provides one such opportunity.

The essays included here were selected from over fifty that were submitted by teachers who participated in the First Annual Rural Alaska Instructional Improvement Academy in Fairbanks in May, 1987. The essays were written as a followup to the academy, based on the teachers' reflections on their own experiences in rural schools, as well as on the academy workshops they attended and on the four readings included in the last section of this publication. The teachers were asked to write about either their own notion of the ideal schooling process for rural Alaska (first section of essays), or what they considered to be an appropriate curriculum unit for village schools (second section).

Although the essays represent a range of views on, and experiences with schooling in rural Alaska, even the casual reader will recognize the common threads of a strong commitment to improving the quality of education in village schools, and a willingness to be innovative in pursuit of that goal. Teachers themselves don't always recognize the level of insight into social, cultural and educational issues they have acquired while struggling with the day-to-day challenges of teaching. This collection of essays provides ample evidence of the creative energy, the curriculum sophistication, and the cultural sensitivity that is present in Alaska's rural schools.

These teachers, and the many others like them, are the unsung heroes of our educational system, breaking new ground in pursuit of better ways. To them, this collection of essays is offered in salute.

As the editor, I wish to express my appreciation to all those who have helped pull this publication together: Jackie Scholle and Annmarie Kuhn for their typing and editing skills; Jean Findley for converting the material from disk to final document; and Kelly Tonsmeire for sponsoring the Rural Alaska Instructional Improvement Academy and providing the financial support for this publication. Finally, I want to thank all the teachers who participated in the academy and those who submitted essays that weren't included in this collection. I hope you will find your ideas and concerns represented in the essays that follow.

Ray Barnhardt, Editor

University of Alaska
Fairbanks, April, 1988

Section I

SOME THOUGHTS ON VILLAGE SCHOOLING

The essays in this section reflect teachers' thoughts on what might be the most appropriate schooling process for communities in rural Alaska if we removed some of the current constraints, i.e. state requirements, administrative structures, physical facilities, curriculum expectations, textbooks, etc. From these essays, we can get some indication of where rural schools may be headed in the future.

APPROPRIATE SCHOOLS IN RURAL ALASKA

by
Todd Bergman
New Stuyahok

In the real world, "ideal" situations never occur. Even in the scientific laboratory it is impossible to create "ideal" conditions; there is always variability and, in turn, error.

Therefore, the following description of an ideal school has to be viewed as a purely philosophical account of what may be possible. What may be successful can only be assessed within reality. It is only with these precautions that I would attempt to portray the "ideal."

In this paper, I will conceptualize an ideal educational system for Native communities in rural Alaska. I will discuss the ideal political and administrative environment and present the relevant community and school background. In addition, I will address the design of an adequate school facility and describe an appropriate structure and organization for the educational system. Curriculum content and sequence will be approached by content area, and relationships among various components will be established. Particular attention will be paid to self-determination of rural people, the educational environment, and to an appropriate notion of development and cultural realities.

The political realities of rural Alaska have been dominated by the Western culture for the past century. Federal and state authority have tucked a blanket of power over the indigenous people of Alaska. Requirements for the funding of rural educational projects have been tailored to Western culture and have demonstrated little, if any, regard for indigenous cultures. Federal and state requirements have laid the ground rules for appropriate facilities, structure, organization, curriculum, and special projects. Under these shadows of dominant authority, the provision of local control of rural education has become questionable.

If ideal conditions were to develop in rural Alaskan education, local authority would have to be incorporated into the power structure now in effect. Federal and state authority would need to recognize the traditional tribal structures as legitimate ruling bodies capable of governing community and regional affairs as they have successfully demonstrated for many centuries.

The tribal council would be the governing context within which all decisions regarding the community would be made. Since the organization of this council is more attuned to indigenous forms of decision making, it could be expected that the decision-making process would become more productive. The tribal council would also govern decisions concerning the school. In rural villages, the community includes all people and facilities. Therefore, the school cannot exist as a separate technological entity that seeks to remain detached from community processes. Decisions affecting the school affect the community and vice versa.

It would be up to the village council to decide how the school needs to be structured and organized. Outside educational agencies—state or federal—would serve as resources to the community. Administrators would operate under the village council and act as organizers, facilitators, implementors, evaluators, resource people, and mediators between the community and outside forces. Teachers, Native and non-Native, would operate within the village to facilitate the students' learning experiences within the daily life of the community.

Within this new political context of education, a new administrative style would have to develop. Administrators would need to be skilled in dealing with the larger bureaucratic forces, yet committed to the cultural needs of the rural community. The role of the administrator would have to become more that of an organizer and less that of a leader. The conventional administrator/leader seeks to establish his or her authority to gain the power to rule the educational institutions. The new administrator would need to develop ways of helping others to use their power. This means that he or she would have to develop strategies for utilizing power and control to meet the educational goals of the community. This administrator would be a true representative of the governing tribal council. In this way, the traditional push-and-tug between local administration and school board could develop into a more cooperative, goal-oriented environment.

I believe that any effort to conceptualize an ideal school for indigenous communities in rural Alaska needs to consider such radical changes within the political and social context of the school. Many Native corporations and the Alaska Federation of Natives have been struggling to bring about such changes. Some of these attempts have been successful, while others have not. Most of these efforts to establish alternative forms of education have not been supported by the Western educational system. In many instances, Native people have had to recognize that if they wanted educational institutions that were more sensitive to their needs they would have to establish these institutions through their own efforts.

One of the major steps in developing an ideal school system for rural Alaskan communities would require that traditional Western practices of organizing an educational environment be abandoned. School needs to be an idea and not a place! Conventional time needs to be of little importance. The traditional Western notions of classrooms, periods, and separate subject matter need to be critically examined. Whereas some subject matter may fit into an hour block of time, other subject matter may not be suited to such constraints.

In the ideal rural educational environment the notion of curriculum needs to assume a new meaning. Curriculum needs to be reconceptualized to include not only learning experiences associated with school, but all learning experiences in a person's life. Elements of formal, nonformal, and informal learning must be complementary and not conflicting. Currently, most of the curriculum content in rural Alaskan schools conflicts with the indigenous people's hopes for education. Native students who earn degrees awarded by the dominant culture find themselves caught in the conflict between two cultures. Therefore, it is essential that the teaching of traditional academic and vocational concepts be integrated with the teaching of other survival skills present in the community.

Another important subject matter component would have to be bilingual instruction at all grade levels. Assuming that Native children enter the school speaking primarily their Native tongue, English would have to be taught as a second language from grade three on. During the first two years of schooling the child's Native language would be utilized exclusively. In grades one and two, writing skills in the Native language and formal learning skills would be emphasized. In the third grade, English would be introduced as an academic subject and as a survival skill. This notion of English as a survival skill focuses on the English language as a necessary tool for communicating with and understanding concepts of the dominant culture. An example would be the vocational area of graphic arts. The majority of the terminology associated with graphic arts is only relevant in the English language. Native language does not address many of the

the elements within graphic arts since this area was traditionally not a part of the Native culture. In this sense learning would become truly bicultural.

Within this framework, the concept of teacher would have to be expanded to include parents, elders, community members, guests, and, most important, the students themselves, in addition to professional teachers. Peer teaching would be a key component of the entire system. As students would become older (high school age), they could be peer teaching not only one another but also primary students, thus serving as role models for the younger children.

Formal learning areas associated with the contracted teachers and with peer teachers would include mathematics, English as a second language, social/political science, general science, and computers, which would be integrated at all levels, and in vocational subject areas.

Nonformal learning areas associated with parents, elders, community members, guests, and peer teachers would include Native language (oral and written), Native religion, Native arts, subsistence skills (ranging from hunting, fishing, and trapping to trap construction, food preservation, and cooking), and other traditional Native skills, such as boat and sled construction, dance, storytelling, and all other cultural activities that are essential to the maintenance and development of the local-indigenous culture.

Informal learning would complement and connect all formal and nonformal learning activities. If all people within a community were supporting the educational system, then informal learning would naturally function to integrate all components of the learning process. Informal learning activities in which students would engage with members of their own culture as well as with members of other cultures would reinforce both the indigenous cultural elements and formal curriculum content.

Since the major goal of this educational system would be to maintain the local indigenous culture, formal learning would have to be creatively adapted to the local environment. Alaska River and Sea Week was developed with this goal. Formal curriculum content would have to be presented as one way of organizing and conceptualizing the environment. It would have to be emphasized that the Western cultural perspective can only function to complement the indigenous world view, thus contributing to a broader basis for conceptualizing the environment. In this way, formal subject matter could be adapted to support the goals of cultural preservation and economic survival.

Finally, it may be necessary to address the design of an appropriate school facility. The education environment in rural Alaska is the entire community. Therefore, if may be questionable whether separate school facilities must be provided. Whether or not a school building is necessary would depend on the extent to which the educational program of the community needs to be centralized. If a separate physical plant is to be constructed, the architecture of such a facility would have to be governed by environmental considerations. In addition, an appropriate school facility would have to include features that make it a suitable meeting place for community events.

Let's try and capture in a nutshell the concept of an ideal school for rural Alaskan communities. Traditional Western control is abandoned and a new form of tribal government controls the local educational organization. Administrators serve as organizers and facilitators and as political mediators between the community and outside forces. The teaching staff includes all who are capable of sharing a learning experience. Appropriate school facilities are provided if necessary. However, in general, the environment becomes the school, while the community and the land becomes the classroom. Cultural learning takes place in a nonformal and informal context. Academic and vocational skills are learned in a formal context, but they are applied as survival skills and adapted to the local environment whenever possible. Students operate in a bicultural-bilingual environment. Language is used in ways that are relevant to the context of learning. Usually, formal learning is associated with the English language, and nonformal learning takes place in the Native language.

This ideal educational system will provide opportunities for all members of the community to participate in the educational process. One of the major objectives of this system will be to support the self-determination and self-empowerment of local communities. In the beginning, the new educational system will have to pick up where the previous system has failed. In the process, Native power will be strengthened and Native control of education will be established.

A functional bicultural education system should provide Native people with the skills necessary for making choices and not leave people in a situation over which they feel little control—a situation of being caught in the middle of two cultures. Conflict is inevitable; learning how to acquire the skills to cope with conflict is the means to survival.

LEARNING THROUGH EXPERIENCE

by
Judy Hoeldt
Kaltag

An elementary school that would be ideal for a rural community would use a process-oriented curriculum with a project-centered approach to experiential learning. In this paper, I will describe how a process-oriented curriculum is developed. In addition, I will explain how the project approach and the experiential method of learning can be integrated with the process-oriented curriculum.

Process Oriented

Barnhardt points out in "Culture, Community and Curriculum" (see this publication) that "a process-oriented curriculum recasts content as a means, rather than an end, and it draws on the students' need to learn as the determinant of the educational process". Thus, a process-oriented curriculum builds upon the students' prior knowledge which it seeks to extend or expand. The following two factors are of utmost importance to this process: (1) integration of prior knowledge with new knowledge, and (2) student participation and involvement. A process-oriented curriculum encourages students to seek their own knowledge and to employ their individual learning styles. The process-oriented curriculum involves the students in various levels of thinking such as inquiring, communicating, organizing, interacting, inferring, categorizing, experimenting, observing, decision-making, and problem-solving. With such a curriculum, the students are the "doers" who are in charge of their own learning, and the teacher is the facilitator.

A subject-oriented curriculum, on the other hand, tends to teach fragments of knowledge that are often not related to real-life situations in rural communities. If we want rural schools to become successful in educating their students, we have to involve the students in meaningful learning experiences, not teach them isolated facts in which the students are drilled for the sole purpose of getting work done or pleasing the teacher.

In a process-oriented curriculum, the former subject categories become integrated through the students' experience. Does this mean that we have to throw all our text books away? I believe that text books have their place in a process-oriented curriculum as information resources to be explored by the students and the teacher working together as a team of learners. Curriculum can thus be built by retaining subject matter but emphasizing the underlying structure.

I believe that in a process-oriented curriculum, the teacher's role is very important (and difficult) because it involves integrating subject matter with student experience. As a way of doing this, I see the teacher introducing the students to subject matter that relates to their everyday experience in the community and then letting the students develop and pursue their own interests in regard to this subject matter.

With such an approach, the role of the teacher would shift from that of a dictator of knowledge to that of a facilitator of learning. The teacher and student would explore their physical, cultural, and social environment together. The process-oriented curriculum thus allows for the community to become involved in and be a part of an educational process that builds upon the students' cultural background instead of segmenting it into twenty-minute bilingual lessons. Such a curriculum would contribute to helping the students become informed adults who can relate to their community and culture, adapt to an ever-changing social and cultural environment, and interact with members of different cultural groups.

Project Centered

A process-oriented curriculum becomes most effective when learning takes place under a project-centered approach. Barnhardt quotes Harrison and Hopkins (see this publication) who provide the following definition of the term "project": "In reference to a cross-cultural training program, where 'project' is used to refer to a process-oriented activity requiring a learner to:

1. Obtain information from the social environment (communication);
2. Formulate and test hypotheses about forces and processes present in the environment (diagnosis);
3. Select and describe some part of the situation which is to be changed or altered (problem definition);
4. Plan action to solve the problem (commitment, risk-taking);
5. Carry out the action, enlisting the help and cooperation of others (influencing and organizing);
6. Verbalize attitudes, perceptions and tentative learnings from experiences (cognition and generalization)".

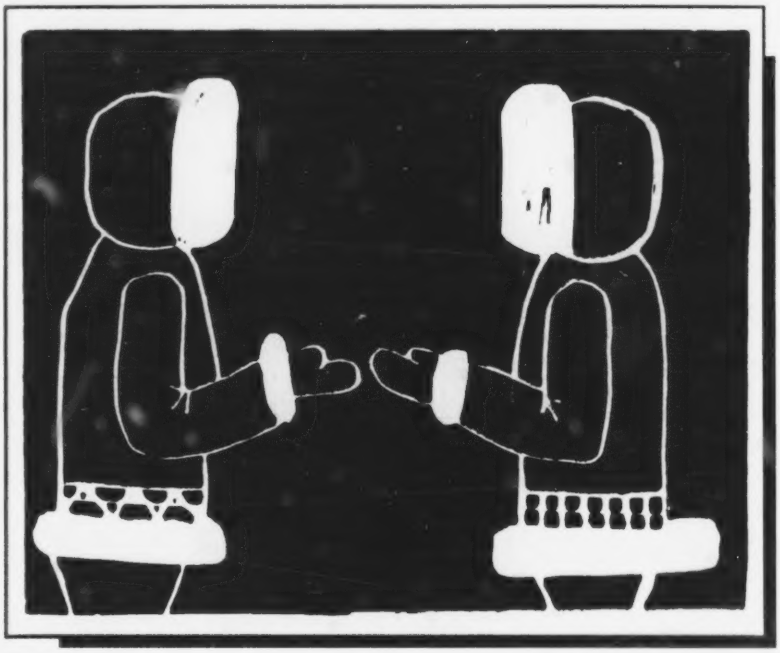
Corwin, et al, in their article, "Weaving Curriculum Webs" (see this publication), provide an example of a learning project that focused on a spider that a student had brought to school. The project covered many subjects such as math, science, language arts, reading, writing, and art. It involved the students in a variety of activities ranging from building a spider's home to drawing spider webs and writing stories about spiders. This example shows that the project-centered approach is so flexible that it can be anything from a mini-lesson to a year-long unit.

I also heard of two teachers in Ft. Yukon who worked with their students on a year-long travel project that incorporated all subject areas. The class did math calculations on mileage, studied the history of different places, wrote for reservations and tours, kept journals, read about different places they were to visit, studied maps and worked out schedules and budgets, and started different business enterprises to earn money for the trip. Both of these examples show the extent to which the project-centered approach can involve the students in subject learning. A science project on rocks, for example, could cover such academic skills as math (using measurements and weights), language (writing stories), reading (finding information on rocks), science (classifying and identifying), and a variety of process skills such as inference, categorization, classification, observation, organization, theory formulation, and identification.

A learning project requires a lot of advance preparation. The teacher must make sure that materials and resources are available and that the project includes a wide enough variety of tasks to provide each student with an opportunity to learn. Again, the teacher takes the role of the facilitator and learner.

I think the project-centered approach is very valuable because it draws on real-life experiences and includes all academic skills. It's like going from a small seed and watching it grow and spread over a vast area. Yet, the most important implication of this approach is that the students are acquiring skills through applying them to real-life situations. With the project-centered approach, the students learn through solving their own problems. Thus, the students are taking on a new role which is that of a teacher—a seeker of knowledge and explorer. In this way, the students become accountable for their own learning as they learn to take on responsibility and to be proud of their discoveries and achievements.

The project-centered approach fosters the students' positive self-concept. When completing a project, the students are not rewarded with a sticker from the teacher but with their pride in having achieved their goal. The students' pride in their success can only contribute to a positive learning environment. I feel that the project-centered approach gives an independence which contributes to their success and teaches them how to choose between the different life styles they are exposed to.



Experiential Learning

A process-oriented curriculum with a project-centered approach involves the students in experiential learning by offering them opportunities to work out problems by themselves through direct participation in their environment. The teacher's role in experiential learning requires that he or she develop personal relationships with individual students. This can be done through dialogue journals. Dialogue journals are a form of correspondence between teacher and student. The students do free-writing, and the teacher reads it and comments on the students' thoughts, not on grammatical aspects of their writing. As time goes on, mutual respect and trust develops.

The experiential method focuses on spontaneous events and real life phenomena. This method brings the community and the school together as the students acquire an understanding of their real-life experiences. Experiential learning contributes to a better education for rural students because it considers the students' cultural background. In addition, it helps the teacher to learn about the students' culture.

Our educational goal is to prepare students for the world they will enter upon graduation. In experiential learning, the student and the teacher are developing skills the students will need to acquire the abilities to cope with their future lives. The ideal rural school needs to help students develop the skills necessary for facing an ever changing society.

How do we evaluate experiential learning? Observations on student conduct are the teacher's data. The students test themselves by evaluating their experiences in dealing with the world around them. The people in the students world are the learners' critics, and the students are their own defense lawyers. If a student tries something and it doesn't work, that student will learn to try something else. Thus, students' lack of success isn't viewed as a failure but as another problem to be resolved. The teacher as a counselor can offer some guidance for the student engaged in solving his or her own problems. This guidance might consist of directing the student into different directions to look for solutions and resources. As the students are thus learning to test themselves by their own standards and through critical involvement in and exploration of their world, they are acquiring knowledge which they will retain for life.

When I was once asked to think of my best learning experience, I came up with a project our teacher had us do. In second grade, we were to explore our world for wood products. This was a real challenge for me, and I was really proud of doing this by myself. I had to become involved in my community and home life to complete this project. Some of the products on my list were not made of wood, but a group of students were our critics with whom we discussed our findings and made the necessary adjustments. This is only a small example of experiential learning, but it shows how students can become involved in experimenting and how they can use their own learning styles to develop skills.

So far, I've described the ideal rural school as one that uses the process-oriented curriculum, the project-centered approach and the experiential learning method. Now I'd like to be more specific and discuss how the school and the local culture interrelate in many villages. First, I'd like to explain how schooling is usually done. It's done with a traditional academic subject-oriented approach where a certain body of knowledge is transmitted at a certain time of day. Upon checking the schedule, you might catch reading at 10:00 a.m., taught with the district's Ginn reading program. The stories the students are reading probably contain little information relevant to their experience. You might see the bilingual teacher at 1:15 p.m. conducting a 20-minute session on vocabulary. You probably won't hear the students using these words after the lesson. At other times, you may see the teacher grading papers during the class period while the students are filling out their workbooks. This is a small illustration of how rural education looks in many village schools that I have seen.

In this environment, certain changes would have to be made to implement a process-oriented curriculum. The curriculum would have to be developed by the school district in a fashion similar to that described by Helen Roberts (see this publication): "In an adequately integrated bilingual and cross-cultural curriculum, the school should reflect the community in every aspect, not just in revised text materials or special ethnic studies programs. Staff readiness, community support, and student motivation are keys to any successful curriculum, regardless of language or culture". Support from the school district, the community, and the school staff are crucial to the development of a process-oriented curriculum. There needs to be clear and precise communication between administrators, teachers, and the community. It is one thing to try and change your curriculum but it is another thing to get the district and community to support you. To reach our goal of educating rural students to their fullest potential, we have to wade through a lot of political, economic, and social barriers.

As a teacher, I often dream of just teaching the children without going through all the regulations and stipulations one must plough through to reach a specific goal. As a teacher, I know where I'm coming from and what I'm bringing to the classroom. I'm aware of my capabilities, my determination, enthusiasm, and positive outlook. I can visualize projects in my classroom. As a teacher, I want to work with a program that uses to the fullest extent what the students bring to the classroom. I want to try to involve the community by participating in community events and by incorporating cultural learning in all areas of the academic curriculum, such as language, writing, reading, math, science, history, social studies, art, etc.

I can see our rural school with the teacher and the student working as a team to explore the surrounding environment. I don't see our school as a structure with a desk, books, individual paper work and tests, but as an environment conducive to a mutual effort of exploring and extending the students' and teachers personal experiences. Such an approach puts into practice a learning theory that is based on the assumption that students learn from experience.

THE MEDIUM IS THE MESSAGE FOR VILLAGE SCHOOLS

by
Steve Byrd
Wainwright

Secondary education in Alaska, as elsewhere, has been oriented toward the dominant society of the state and country. In the small secondary schools in rural villages, however, such an orientation does not adequately take into account the range of educational needs of the students, nor the limitations and opportunities of the small school. This paper will present a suggestion as to what might be done to address those issues. The change from the existing educational system to a more appropriate approach to education in rural Alaska would involve four basic dimensions of the educational program: (1) the purposes, (2) the content, (3) the structure, and (4) the methods.

At this time, the curriculum of some rural schools reads like that of a school that could be in Portland, Oregon or Seattle, Washington, or in any other city in the country. The only clues indicating that these curricula might be offered to Native communities are courses on Native land claims and on the Native language. Otherwise, the traditional canon of subject areas is offered. Language arts, science, social studies, math, and vocational education are taught to rural secondary students in conventional 50-minute blocks. Lesson plans following the Madeline Hunter format are turned in each week. Even though teachers with rural experience are sometimes given priority during the hiring process, most of the teachers are still recruited from the Lower 48. Since the teachers in rural schools are generally not from the local communities, the villagers are left to make the best of a less-than-ideal situation in which outsiders teach their children the ways of a world away from the village.

Life in rural communities is characterized by constant and significant change. Therefore, rural students need to learn how to cope with radical changes in their lives. They must know how to learn. In their adult lives, these students will not be able to "do what was always done before," as their ancestors did when the villages were isolated from the rest of the world. In order to teach rural students how to learn in a changing world, the curriculum must focus on process and not just on content. Barnhardt, in his study, "Culture, Community and the Curriculum" (see this publication) suggests, "If students are to be prepared to cope with new and changing conditions, they must be familiar with the processes by which knowledge and skills are acquired and utilized. They must learn how to think, communicate, organize, interact, make decisions, solve problems, assign priorities, and most of all, learn." If the students learn how these processes are utilized both at home and in the school, they can apply them whenever and wherever necessary. Static knowledge or even the ability to verbalize that knowledge is not as useful as knowing how to apply particular skills within a process. If people cannot apply the knowledge they learn to their lives, what good is this knowledge? If the people can see no use for this knowledge, why should they want to learn it? To be able to cope with their changing environment, rural Alaskans need to learn these processes along with the usual subject matter.

The Alaska State Writing Consortium provides an example of a teaching/learning process that is familiar to many Alaskan teachers. Writing can involve the students in the learning process if approached in the following way. The students and teacher collaborate to brainstorm topics relevant to the students' lives in the village. Then, everyone in the class, including the teacher, writes a first draft, knowing it will not be a final copy. Here the teacher functions as a co-learner, modeling learning writing for the students. This contributes to building the students' trust in the teacher because she or he becomes a "comrade in arms," by taking on the same assignment as the students. The students and the teacher share their first drafts with each other, editing only for style, grammar, and spelling—not for content. The results of this process are informative and non-threatening. The writers use this feedback to improve their papers. Before the final drafts of the papers are completed, more editing exchanges can occur. Final versions are always published, either by simply posting them on a wall or by printing them in a school publication. Through this effort, students learn not only the writing process, but also such skills as cooperating, listening, careful reading, and following directions. In addition, the students learn the content they address through their writing.

An excellent way to approach the teaching of process is through carrying out learning projects. This summer, the writing consortium class participated in a project that involved the production of a television show. The class was given this task with minimal directives, saying that the show was to be videotaped and that one student was to function as a director, determining the content of the show. After the director had decided on "The Newlywed Game" as the format, a student, who was in the cast, brought a television camera and showed another student how to operate it. Meanwhile, the director and the rest of the class brain stormed ideas for the host's dialogue concepts. These ideas were placed on the board so that everyone could contribute to expanding and revising them. Thus, the class completed a list that included the names of the characters, the places they came from, and the questions the host was to ask. For the show production, the class decided to write the answers by the contestants on a placard for the viewers to read and to include an audio tape with dubbed applause to supply the nonexistent audience. The production of the game show involved the whole class and provided great pleasure to everybody.

Many skills were employed in this exercise. The writing process was utilized. Efficient listening and organization were an absolute necessity because of the given time constraints. Technical skills had to be applied in operating the television camera and the tape recorder. Improvisational acting was required from some class members and all were expected to cooperate with respect for others throughout the process. People had to be responsible for props, equipment, and costumes. Critical thinking was employed in every phase of the project. The content of this particular project was interpersonal communication, but it could have been anything from American history to science trivia. It could be a dramatic production using literature created by the students or adapting a literary piece studied in language arts.

The completion of this task brought the class closer together, contributed to developing self-esteem, and motivated group members to take part in another challenging collaborative venture. The educational experience was stimulating, exciting and challenging. Student motivation was inherent in the project because the participants were united in their desire to complete the production. There was no need for external pressure. Everyone participated willingly, knowing that their work would be rewarded by a final product.

Another class in the Rural Alaskan Instructional Improvement Academy advocated the use of projects that involve television productions as a method for approaching social studies and language arts. For example, the production of interview tapes of elders, or videotapes of traditional artistic techniques could serve to integrate information about social studies or traditional arts and crafts with communication skills that are normally taught in subject-bound courses. In such a project, students would be required to write a scenario and complete a story board before the videotaping could begin. In addition, the students would be asked to elicit feedback from the teacher, the class, and community members. In gathering this information, the students would apply the proof-reading and editing portions of the writing process. In addition, the students would have to successfully communicate with a number of people involved in the production to make sure that people, materials, equipment and setting were properly arranged. The students would also learn much about the subject of the production. For example, if students produced a videotape on three-wheeler safety they would probably know enough about three-wheeler safety to be able to teach a course on the topic by the time the program was completed. Another example would involve the students in the production of a community news broadcast. By working on such a project, the students would not only learn the process of creating a telecast, they would also learn the ways in which their community functions and conveys information.

There is no end to the topics that could be addressed by video programs produced by students. The work could focus on themes from science, health, history, speech, art, music, drama, even mathematics. But process skills such as problem-solving, creative thinking, communicating, planning, organizing, writing, and many others are applied each time the students produce a videotape. This approach to teaching reduces the need for using special techniques to motivate the students. Generally, the students want to produce videotapes and they know that they have to solve a number of problems in order to do so. The students desire to become involved in the video production motivates them to solve these problems. Educators everywhere know that if students are strongly motivated to learn they will learn. Perhaps there was more to Marshall McLuhan's statement, "the medium is the message", than we sometimes acknowledge.

Students are mesmerized by television, but interest that can be channeled into a constructive experience when they produce the show.

For example, a television production class in a village high school produced a commercial this past year. First, each student had to come up with a script and story board for the commercial. Then, the class decided which of these ideas would work best and could actually be produced. The students selected a script for a Pepsi commercial which included the following elements: Students in their traditional Eskimo clothing happen upon a can of Pepsi on the tundra where there is no sign of civilization anywhere. One picks up the can, looks at it, feels it, smells it, and shrugs while saying in Inupiaq "I wonder what it is?" The others respond by shrugging and saying in Inupiaq "I have no idea". The Eskimo holding the can then pulls on the tab causing the can to open with a fizzing sound. Everybody runs away as if the can was a grenade with the pin pulled. When nothing happens the students approach the can again. The Eskimo who picked it up before picks it up once more, sticks his finger in the opening, sucks the bit of liquid from his finger, then, without hesitation, takes a long drink and extolls the virtues of its great taste, still speaking in Inupiaq. The can is quickly passed around with satisfied cheers coming from everyone. When a student discovers a six-pack nearby, the group responds happily and the leader shouts, in English, "Let's go party, man!" Immediately, all jump on their three-wheelers which have been out of the picture till now, and drive off in a cloud of powdery snow while a voice says, "Pepsi, the choice of a new generation."

Students involved in this commercial production did many things. They chose the setting and worked with the Inupiaq language teacher on the dialogs. They had to consult with people in the village about the appropriate costumes. Then, they had to find the clothes as well as the three-wheelers and make arrangements to borrow them. They had to memorize their lines and work on the delivery. They had to learn their blocking (stage movement) which involved reacting to the other actors while following the directions of the director. Of course, the script had to be written and the scenes had to be captured on story boards so that the camera person knew exactly what to expect. The students had to know how to use the camera properly. One student had to have an overview of the whole project in order to direct the other participants. The student who did the "voice over" had to practice articulating at the correct sound level. Virtually everyone had to attend the classes because each student had a function crucial to the completion of the project. Teamwork was vital. Needless to say, "instant replay" was employed throughout the process so that the students could evaluate parts of their production and make subsequent adjustments. The class did it all and could not wait for the next project. The medium was integrated with the message.

Another area in which the medium becomes the message is the use of microcomputers. Young people are not intimidated by the computer—they are fascinated by it. Therefore, when students can use a word processor to complete their writing assignments, writing ceases to be the drudgery it often becomes when the students are required to use paper and pen. Mistakes are corrected easily, and final copies accomplished without the anger and anguish of hurling crumpled papers filled with cross-outs into the nearest waste can. Anything the students do can be saved neatly on a file disk and recast magically on an electronic screen reminiscent of the familiar television set at home.

The Rural Alaska Instructional Improvement Academy offered a course in "Desktop Publishing" which taught the process of publishing written work in multiple formats on a computer. The course employed a method of instruction by which the students were asked to complete a project that suited their needs and were taught the publishing process at the same time. One student worked toward understanding a particular computer program that creates copy suitable for publication in a newspaper or magazine. This student was highly motivated to learn the program because he needed to complete a layout for a newsletter to be disseminated throughout his district. With little help from the instructor he produced a layout that was "camera ready" for the print shop. Once again, the process was the subject being learned, and the method was a project assignment.

This approach works for anyone, but it is particularly well suited for rural villages because the project involves concrete action, and the process applies to real situations that could exist in the rural community. Students in rural Alaska often learn to accomplish tasks by watching and doing, or by trial and error. They are rarely told how to do things, and reading is usually the last method they use to figure out a problem. Yet, teachers who come into these villages from the outside often use "telling" and "reading" to instruct their rural students. As a result, learning becomes a much slower, less joyous, less memorable (i.e., not retained as well) process than it needs to be.

A teacher reading this article may be thinking "But designing such projects would be so time consuming that I could never do it". There is an answer to this problem: Have the students help with the design of the projects. This may sound like the students are invited to design their own curriculum. However, this is not entirely true. The teacher is the one who knows the concepts and processes that need to be conveyed. The teacher presents these goals to the class and then they work together, creating a project that will accomplish these goals. Once again, the teacher functions as a co-learner and facilitator instead of acting as a knowledge spouter and evaluator. Students who have the chance to direct their own learning invest more effort in the process than those who must comply with teacher-designed assignments. The burden of producing an unending flow of motivating instructional designs is thus taken off the shoulders of the teacher and distributed to the entire class. This way, much more energy flows into the composition of an instructional unit.

Students learning processes through participating in projects do not see the world as being compartmentalized into social studies, language, science, math, etc. Many skills that are called into action in daily life, such as reading, measurement, language, listening, physical strength, cooperation, mechanics, principles of science, and even politics could enter into a project that involves repairing a snow machine. In this way, the classroom would reflect the world of the students. Skills and processes taught through projects would allow students of rural Alaska to carry out school tasks from inception to actualization, and thus become more capable members of their communities.

MULTIPLE INTELLIGENCES: A COMMUNITY LEARNING CAMPAIGN

by
Raymond Stein
Sitka

In May of 1987, I attended a session of the Rural Alaska Instructional Improvement Academy during which Alaska Commissioner of Education, William Demmert delivered a lecture. In part of this lecture Dr. Demmert mentioned the "Theory of Multiple Intelligences" by Howard Gardner (1985). Gardner states that the mind has the following seven areas of intellectual development: linguistic, musical, logical-mathematical, spatial, bodily-kinesthetic, interpersonal, and intrapersonal. In his lecture, Dr. Demmert pointed out that in most schools only two of these intelligences, the logical-mathematical and the linguistic, are being systematically developed, and that a better program would address all seven. In addition, Dr. Demmert emphasized the importance of involving the community with the school, and of incorporating the local culture in the school curriculum. There are many strategies which could be used to implement these suggestions. In the following paper, I will present a framework with which I would address some of the issues outlined by Dr. Demmert.

However, before I begin, I have to enter a caveat. Although I have considerable experience living in and/or visiting isolated and rural villages overseas, I have scarcely done so in Alaska. I do not pretend to have an understanding of the myriad of cultural specifics that come naturally to Alaska Natives and, perhaps, to experienced teachers and other residents of rural areas. I realize that my ideas could be unworkable in rural Alaskan communities and offer them with that caveat in mind.

My framework intends to address some of the issues raised by Dr. Demmert through a community-based campaign involving the school, children of any age, and most importantly, their parents (or other relatives or guardians). The basic premise of my plan is that the seven intelligences must be developed, that all seven are important, and that attention paid to the nurture of each will pay off in the future.

In its simplest schematic form, the planned campaign would seek to stress the "exercise" of one of the intelligences each day at home (hopefully, several would be exercised at school). The responsible adult would choose from a variety of activities designed to stimulate the selected intelligence and then engage in the activity together with the child. Since most of the activities would be enjoyable, they would be anticipated by the child. Through this process, ideally, the parents would become more involved in their children's education, both preschool and post-entrance, and the children would learn better at school.

I want to stress the word "ideally." I am aware that involving the parents would be the most tenuous and unpredictable aspect of the entire campaign. Each step of the project would have to be carefully considered to avoid alienating parents who might have objections. Moreover, the number of parents who might not be inclined to participate because of their occupation, age, health condition, lack of education, or other reasons might be large. However, it would be extremely important to try to involve these adults because their children in particular may need to be exposed to additional learning activities.

In order to implement such a campaign, publicity would have to be considered. I would suggest putting up posters with catchy, but puzzling slogans approximately two months before the campaign starts. A possible slogan might read "NewSchool is Coming," or "NuSchool is Coming." (The misspelling indicates the experimental nature of the program and, by conveying a more informal tone, may reassure those parents who feel negatively about school.)

The slogans and mystery posters would serve to develop an aura of wonder and to prompt community discussion. Several weeks later, a new set of posters would go up. These would be somewhat more explanatory, inviting all adults to a brief series of workshops. The scheduling of these workshops would have to be adjusted to the time frame of other community activities.

The workshops would address the following objectives of the learning campaign:

1. Fostering cooperation between the school and the community;
2. Involving the parents more with the children's education and involving older children with the education of younger children;
3. Providing activities that stimulate the development of each of the seven intelligences;
4. Providing a structured setting in which culture can be transmitted.

The adults could be informed of the campaign's purpose as follows: "If we use standardized tests to compare the academic performance of Alaskan students to that of students from all 50 states, our student achievement levels tend to rank at about the fiftieth percentile, or average. We should of course interpret these results positively and say that we are halfway to excellence instead of saying that we are halfway to failure. We should also be aware that standardized tests have their own shortcomings, particularly with regard to cultural bias. Nevertheless, we have plenty of room for improvement, and that is why you are here tonight. We want to improve our children's education and learning abilities, and eventually their test scores, too."

"It is commonly understood that a balanced diet leads to better health. The alphabet soup of vitamins which the government has determined to be essential to the well-being of our bodies is quite extensive and still growing. What we want to present tonight is the idea that our minds need a variety of stimuli to develop their full potential. Reading, writing, and arithmetic are the foundation, just as the three basic food groups form the foundation of a balanced diet. But there are further intelligence areas we need to emphasize in order to give our children the variety of intellectual skills they need; just as our bodies need those vitamins and minerals to keep in top shape."

At this point, the idea of the multiple intelligences could be presented, and details and references could be offered to anyone interested. The seven intelligences could be listed as follows and defined when necessary:

1. Linguistic intelligence: for speaking (rhetoric and explanation), writing, mnemonics, analysis of language itself;
2. Music intelligence;

3. Logical-mathematical intelligence;
4. Spatial intelligence: creating an image in the mind and following visual clues;
5. Bodily-kinesthetic intelligence: skilled use of one's body.
6. Intrapersonal intelligence: access to one's own emotional life;
7. Interpersonal intelligence: the ability to notice and make distinctions among other individuals.

The parents would be encouraged to participate in a program that would involve them in at least one parent-child activity daily. This activity would emphasize one or more of the seven intelligences. Therefore, all seven intelligences would be addressed in the home within a week. In the following week, the parents would go through the cycle choosing the same or different activities. The parents would have considerable latitude as to the timing and selection of activities; no attempt would be made to dictate what to do or when to do it. Being able to structure the program to fit their own needs and inclinations, the parents would likely develop more of a sense of ownership of the program and be more receptive to outside advice. Ideally, the routine of daily activities would become part of the rhythm of the household, community, and school district, thus developing into an area-wide process that would be part of growing up for the children.

A list of recommended activities would be supplied to parents in order to advise them as to what games or exercises or songs, etc. are relevant to each of the intelligences. An abbreviated list which includes a tentative assignment of specific activities to particular days of the week follows. Most of the listed activities could be adapted for different ages.

Monday: Logical-Mathematical Intelligence
counting;
do some brain-teasers from a puzzle book (these are available for different age levels);
practice estimating;
work on math homework.

Tuesday: Spatial Intelligence
identify geographic directions;
play with blocks or modeling clay;
do brain teasers which require visualization;
draw, paint, carve, build.

Wednesday: Intrapersonal Intelligence
bond with an infant;
give positive reinforcement when child expresses self in an appropriate way;
involve the child in rituals important to the community, culture, or family;
help the child understand unusual feelings;
teach rules of etiquette and social protocol.

Thursday: Linguistic Intelligence
read to the child, or have the child read to you;
recite a familiar legend or tale, or have the child do so;

tell jokes;
read or write a poem;
explain a process, give instructions;
write a letter, keep a journal;
study the Native language, or a second (or third) language.

Friday: Interpersonal Intelligence
have a friend or friends over, or visit a friend;
positively reinforce appropriate communal behavior.

Saturday: Bodily-Kinesthetic Intelligence
play a sport;
carve, paint, draw;
hike, hunt, fish;
dance, act;
use tools, chop wood.

Sunday: Musical Intelligence
sing hymns, songs;
listen to music;
learn to play an instrument;
whistle, make up a tune.

Obviously, most, if not all, of the listed activities are part of parents' daily interactions with their growing children. Moreover, some activities, such as chopping wood, may already be part of a young person's responsibilities and as such, not count as an enjoyable activity any more.

On the other hand, it must be pointed out that many children lack consistent reinforcement of the basic intellectual needs addressed by the listed activities. Whereas the campaign is primarily oriented to these children, it can be assumed that most families would find a summary of the seven intelligences and a list of corresponding projects helpful. Some parents might find it reassuring to see a systematic presentation of activities in which they are already engaging successfully. Most likely, the campaign would positively reinforce at least some aspects of the parenting of everyone in the community, thus providing the whole community with some positive feedback from the start.

However, the implementation of such a project is a sensitive issue and would have to be handled carefully. One would have to take great care to avoid forcing anything on the community. I suggest presenting the campaign as a sort of community game; a serious game to be sure, but one in which all can participate and everyone can win. In predominantly Native communities, it would have to be emphasized that this campaign is not just another project developed by Caucasians for Caucasians, but that it is intended to contribute to developing any child into an intellectually well-rounded individual, no matter whether that person goes to college or survives by subsistence throughout life (Gardner has loaded his book with examples of expressions of the intelligences from other cultures).

In Native communities, cultural activities could be emphasized. Traditional language, songs, dance, arts, stories, crafts, clothes, constructions, can and should be part of the cycle of daily activities. The program can easily be adapted to patterns which support the maintenance and transmission of Native culture. This flexibility could make the program very attractive to Native parents. In addition, parents may find the program valuable because it provides them with an opportunity to work together with the community, thus ensuring collectively that their children develop holistically and to the best of their potential.

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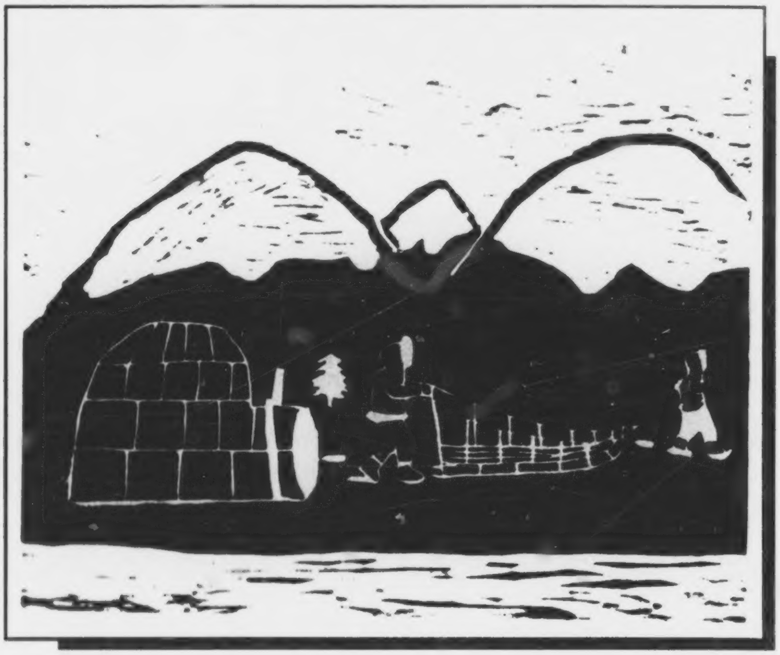

OBSTACLES TO A COMMUNITY-BASED CURRICULUM

by
Jim Vait
Atmautluak

In the following paper, I will briefly describe a situation in which I had an opportunity to involve my students in a village-centered project and then I will discuss what I believe were the main obstacles to our participation in that project. Finally, I will summarize some educational problems that might have been addressed had our school found ways to cooperate with the community.

During my two years of teaching in Atmautluak, the elders of that village became involved in the formation of the Yupiit Nation. Thus, I found myself in the situation of having to teach government in a village where a new government was being formed. However, unlike the teacher who used a captive spider as the focal point of a project which encompassed an entire curriculum (see Corwin, et. al., in this publication), I was unable to help my students become involved in the dynamic process that was unfolding in their community. The reasons for my failure to do so did not lie with my lack of interest or with the administrations' or the elders' objections to our participation, but rather with the fact that the school was structured and organized in such a way that a community-centered project could not be easily accommodated. For example, government class was scheduled from 10:40 to 11:25 a.m. which was not necessarily the time when the elders met to discuss important issues. On the other hand, the stated educational objectives that called for the students to "list" the eleven departments of the executive branch or to "tell" the year and month in which the Russians relinquished their control over the territory of Alaska did not exactly provide for the study of a government formation either.

In their struggle to retain title to their lands and to maintain their traditional lifestyle, the elders were combing books and historical documents looking for precedents and ideas that would provide the legal basis for the tribal government. They wrote letters to congressmen, lobbyists, and leaders of other communities with similar goals. They delivered speeches, expounding their ideals and desires. There were questions about the feasibility of beginning a fish farming project that might provide an additional economic base for the village. The elders' efforts during this retribalization movement reflected a vitality and an interest that could have commanded the students' interest. Here a project presented itself which could have encompassed the entire curriculum.

As these proceedings were occurring in the city offices, a scant 200 yards from the school, the students learned about history and government in the conventional manner. They wrote some letters, paragraphs, themes, and short stories as they were assigned in their writing classes. In speech class, the students read the Gettysburg Address, listened to speeches by Martin Luther

King, and delivered some speeches on basketball. They learned about math and science in classes allotted to those subjects.

The present education of our rural students seems to focus on preparing them for a life that exists only away from the village. The project of forming a tribal government could have provided the students with an immediate impetus to learning and with an opportunity to use their academic skills in the village setting. The students could have learned departments of the state's executive branch through contacting state agencies rather than through memorizing a formidable and somewhat meaningless list. Writing skills would have been honed by the need to communicate and, therefore, would have been better retained for future use, not only in the village but anywhere the students would choose to live. The students could have analyzed historical events to explain today's dilemmas instead of learning to view history as a series of static facts. Studies about the bioregion; its waters, soils, and life-giving capabilities; and the problems of increasing its productivity could have provided vital information for the village as well as a well-rounded science curriculum. I assume that the students would have compared government structures as well as government philosophies.

The elders invited us to participate in their retribalizing efforts. Unfortunately, the setting and structure of the village school didn't lend themselves to a melding of talents. I had my agenda to follow, and the elders had theirs.

Several factors would have been crucial for the school to be able to assist the village in the formation of a government. A keen sensitivity to the needs of the community and knowledge and respect for cultural patterns would have been required. Highly developed social skills would have been necessary to ensure a smooth relationship between the school and the village. Any notion that the elders were engaged in an exercise of futility would have needed to be set aside.

It would have been necessary that the school administration and the entire staff commit themselves to the project as an educational experience. The random activities which would have been generated in this type of project might have precluded a normal scheduling pattern. Unless the staff had agreed upon the validity of this approach, conflict might have arisen when an important meeting would have preempted the day's planned algebra lesson.

Most school activities are based on the notion that learning must take place in a classroom with students sitting in chairs arranged in one of a certain set of patterns. The education establishment has spent millions to construct these monuments and therefore expects that these settings will be used in a prescribed manner. For the school to be able to participate in such a community-centered project, new thinking about the use of classrooms (Could they be opened for village use? Would that be legal?) as learning sites would have to occur.

Such a restructuring of the school environment raises the question of control, which might make some people uncomfortable. Presently, the administration and staff determine which subjects are taught and how the subject matter is presented. In a village-wide project this control would be lost, and many might feel threatened as community members gained the power to influence the direction of learning. Even more threatening could be the emergence of naturally gifted members of the community as teachers. Professional staff would have to reassess their roles as "transmitters of knowledge and skills"; they would have to approach the setting more as learners than as authorities. For some, it might be very disconcerting to realize that under such circumstances, the school would be serving the needs of the community instead of the community serving the needs of the school.

Another question is how teachers relate to such a project approach to learning. For some it might be difficult to visualize effective learning taking place in this setting. The happy positive part of me can picture students cooperating and working diligently, inquiring and observing. The realist, skeptical side of me envisions the students at best hiding in corners, reading comic books or playing checkers. (Let's not even imagine the worst scenario!) Perhaps my experience with a project-centered approach is too limited. Methods of tracking, the types of objectives and the actual activities the students and teachers would engage in are not obvious to me. Unless the teacher has a vision of its workability, such a project would be doomed to failure. Specific training or exposure to an ongoing project would be helpful in learning to visualize the process.

Several problems that are endemic to rural schools would have been addressed had we been able to participate in the community's efforts to form a government. The students would have been free to learn within the existing cultural patterns of their community, rather than learning about their culture as it is perceived by outsiders. If the students and the elders could have worked together on issues of immediate concern to the community many of the problems of bilingual and cross-cultural education would have been addressed. Through discussing present-day problems with the elders, the students would have increased their fluency in Yup'ik and gained cultural insights.

The "failure syndrome," the downward spiral of teacher expectations, student motivation, and student achievement, which was articulated by Helen Roberts (see Roberts, in this publication), could also have been addressed in this project. I believe that any educator who is willing to be open will have to admit that he or she is familiar with this problem. Roberts suggested several activities to raise student motivation, such as developing more relevant school programs; developing cross-cultural materials; devising a flexible schedule to accommodate diverse lifestyles; involving parents in curriculum development, instruction, and evaluation. All of these would have been part of the project. Also included would have been several approaches to raising student achievement such as providing opportunities for individual and group achievement. In addition, the project would have contributed to increasing teacher expectations through involving the staff in curriculum development and through reducing teacher isolation. Since the project was governed by real-life demands, the community might have expected more from the students than the teachers do. The students' reading and communication skills could have been a valuable asset to the communities efforts. Through interacting with members of the community, the students could have contributed to improving the reading skills of the whole village.

This project was too large to undertake without related experience. I am not prepared to facilitate the restructuring of an entire education system. I have experienced some positive results with projects such as the yearbook and the ongoing project of the school newspaper. However, these have been school-centered rather than village-centered activities. I believe that for starting a more community-centered teaching/learning program, it may be appropriate to expand smaller and/or existing projects to include village activities.

BUILDING THE DREAM HOUSE

by
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McGrath

When a beaver comes to a new location and decides to stay, the first thing he does is start to build a place for himself and his family—a place to educate the children, if you will. The water area may be completely new, created recently by changing patterns of sloughs, and previously used only by a wandering otter or so. Or, it may be older and already well inhabited by muskrats and a host of other water animals. However this may be, the beaver will build a place for himself that is suited for a beaver, and he will use beaver ways to do so. If that means building a dam that completely changes the environment for the other inhabitants of the pond, perhaps flooding nests and killing incipient water fowl, the beaver will still do it. The beaver will never build a place specifically suited for any of the other water residents (cultures); he may tolerate their presence within his creation, if they don't disturb his affairs too much.

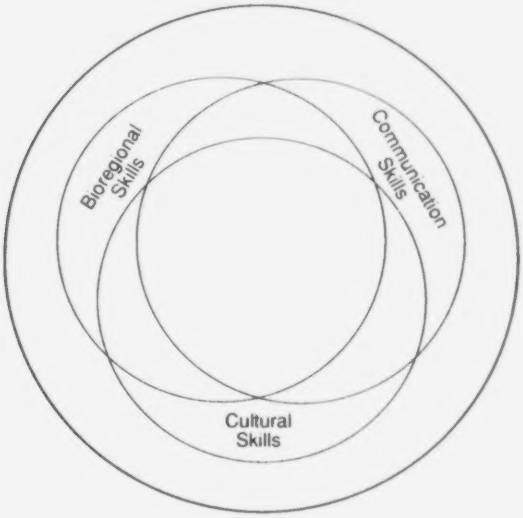
The Alaskan school system is like the beaver's habitat. Its builders and current occupants follow a pattern that seems to be so deeply ingrained that it is hard for anyone to even imagine true alternatives to these established ways. Most available educational alternatives are either like the beaver's choice to use an established pond (the subject-centered, traditional curriculum) or like his decision to dam a running stream to create a new pond (the process-oriented, project-centered curriculum). It is almost as hard to convince communities and educators to try any other truly different approach to education as it is to get a beaver to live in a crane's nest. Yet, it may be possible to get the beaver to consider modifications that make his home look more like the muskrats' houses.

Now in education, how could we go about this process of changing the beaver? For a start, it would probably help to have some sort of idea of what kind of educational system we want to be the outcome of this process—and then to realize that the end product most likely won't resemble this ideal much more than the beaver's house will ever resemble the muskrat's. The goal is to cause some change in the desired direction. The focus is on the adjusting process and not on a specified end product.

With this in mind, we need to look at the curriculum, teaching approach, physical setting, and school/community relationship which we would consider ideal, and then develop a process with which we will adjust the school. However, once we have started this adjustment process, we need to keep in mind that the original direction may change, so that at any given time, the school may not resemble what we first had in mind. The important thing is to have the adjustment process in place so that the school system can grow and adapt to fit the needs of the changing society.

The Ideal House

In his paper "Culture, Community and the Curriculum," (see this publication) Ray Barnhardt stresses the need for experiential learning. The ideal rural Alaskan school would employ experiential learning to the fullest extent possible, using a process-oriented, project-centered curriculum. The structured content of this curriculum could be patterned after Ron and Suzanne Scollon's "Axe Handle" curriculum (see this publication). This curriculum could be graphically presented by three intersecting circles, representing bioregional, cultural, and communication skills. Most of the learning process would be represented by the intersecting parts of the circles, reflecting the integration of the three skill areas in a project-centered curriculum. However, the ideal curriculum for rural Alaska would need to incorporate a fourth circle, encompassing the three previous curriculum descriptors and representing personal survival skills (see diagram). This area includes all skills and knowledge necessary for the individual to survive in the ever changing environment of rural Alaska.



In addition to representing everything included in the areas of the three inner circles, the fourth circle would encompass issues of self-care, such as health, physical fitness, and mental health. Learning in these areas is, of course, interrelated with learning in all the other curriculum areas, and is very much influenced by the teaching approach of the school. However, in the changing social and cultural environment of rural Alaska, it needs to be especially emphasized that children learn how to keep adjusting their ways of developing their self-identities, dealing with life events, and taking care of their physical and mental well-being. These very basic issues are more important to the survival of the student than all other curriculum content. If the school does not deal with the issues of personal survival, everything else taught is for naught! (There is no use in teaching a relocated beaver to push a button to get his food from a trap door if the beaver then swims into an oil slick and drowns.)

Another way in which the "Axe Handle" curriculum would have to be modified is by including mathematical and technical competence within the section for communications skills. Like other communications skills, mathematical competence is necessary for any individual to survive in any imaginable (or unimaginable) future. To gain true fluency in either bioregional or cultural skills, the student needs to be able not only to apply the calculation skills required by the cash and by the subsistence economy, but also to understand the basics of mathematical logic. Mathematics should be considered as simply another language or aspect of language and should be taught like a language, with adequate time, concrete experiences, and applications. It should also be integrated with all other aspects of the curriculum.

Competent adults also need to know something about current world technology, which is changing extremely rapidly and will likely continue to do so. As the Scollons point out, technology learning needs to include both learning the immediate technology of a given area and its cultural past and learning the technology of the world at large. In other words, communication skills require competence in using state of the art technology as it grows. This includes, in 1987, understanding of and ability to use computers (with modems for research and communication), international telephone lines and airports, and a myriad of other things (maybe even the ability to play video games?).

At the same time, the students need to know the technology of their cultural past. Not only does this afford them the choice of remaining in the rural communities or returning to them in times of economic depression, it also prepares the students for those future scenarios predicted by less optimistic prophets. In addition, this knowledge helps individuals to form a positive self-image, thus contributing to their kind of learning represented by the outer circle of the curriculum.

Teaching Approach

The best curriculum is worthless if the teachers who deliver it do not understand and agree with its overall philosophy, goals, and implementation procedures. The teachers also need to have some understanding of the students, their learning styles, cultural background, and current living conditions.

In an ideal education system for rural Alaska the teachers must view each student as an individual and focus on that student's present and ultimate competence in all four curricular areas. The teacher must agree that experiential education is the only education that makes sense to the students and therefore the only education that will be interesting and relevant to them. The teachers must believe that the process of learning to learn is the end product of education, and that the curriculum content is for the students to use to practice this process. For example, the outcome of science instruction is the students' ability to use the scientific method rather than their ability to display knowledge of the anatomy of a frog. Mathematical logic and fluency in mathematical reasoning become vastly more important than knowledge of timetables. In addition, the teachers in such an ideal system should agree that project-centered instruction is the best currently known vehicle for experiential education and they should be aware that student-generated projects are often more valuable than teacher-generated projects. (See Corwin, et al, this publication) The teacher's role, then, becomes one of a facilitator, guide, coordinator, counselor, and tutor who makes sure that each student masters the necessary basic skills and that help is available.

The teacher should expect each student to learn all necessary skills to the best of his or her abilities, and to a level which makes that student a competent member of his or her age group. The teacher should make sure that the students are always motivated and interested, viewing their education as their own concern and responsibility.

The Physical Setting

In an urban environment a "school without walls" may be the ideal setting for the kind of education proposed in this paper. However, in the transitional cultural environment of rural Alaska it might be difficult to support such a concept. Whereas in many communities, the traditional community house or kashim would be available for gatherings, this structure usually does not include the facilities necessary for implementing the Western portion of the curriculum. Therefore, it seems practical at this time to retain some type of school building.

What, then should this school building include? Several things are necessary to create an experiential learning situation which focuses on processes through implementing projects. There must be areas in which individuals or small groups can meet with a teacher/tutor. Books, media, audio-visual equipment, and computer terminals should be available. One or more large unobstructed work areas, with water supply and easy-to-clean furnishings, would accomodate art and construction projects. A shop area equipped for working with wood, metals, and engines would be needed in communities that don't have such a shop. An area for presentations and artistic performances would be nice, although these activities could usually be accomodated by the kashim. The students would probably like some individual space to keep their possessions and small projects. A gymnasium is a cherished feature of most present rural Alaskan schools, and the attendant shower/locker rooms is especially important in communities whose public facilities don't include this feature. Most parents also appreciate the school building as a warm, well-lighted, safe and monitored place for children to go during the colder winter days.

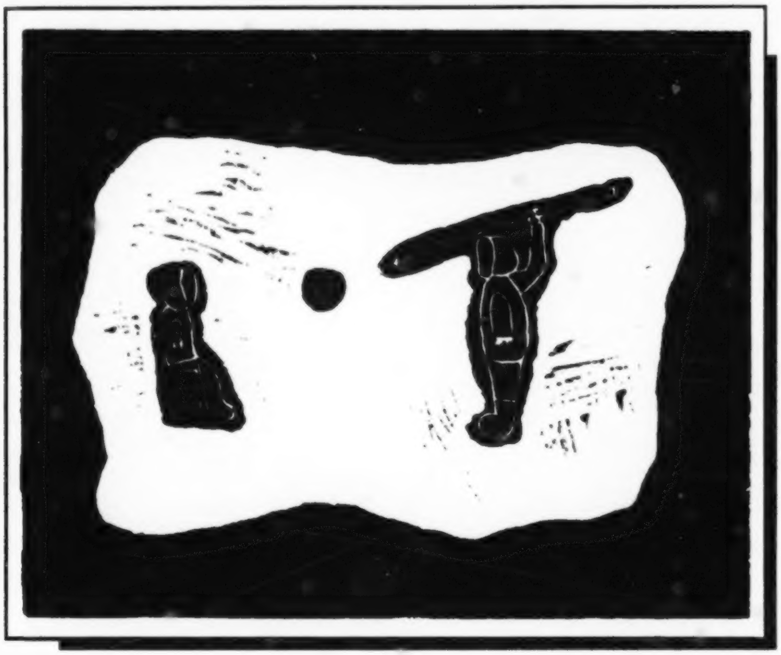
In addition, the school building would need to house those learning materials which are not available elsewhere in the community. All these features and functions might be best represented by a school building that would center around a circular library with a large, sunken, carpeted area in the center. In this library, students could read, seated on beanbags, foam chairs or on the steps. Dramas and presentations could be given in the sunken area with the audience seated around the edges. Computer terminals and other audio-visual equipment would be available at the periphery of the library. A section of several smaller "offices" would join the library area to a larger, open, and uncarpeted "multipurpose" area, which would be equipped with water, cooking, and refrigeration facilities. This area could be attached to a gymnasium and/or shop area. Individual student possessions and projects would be kept in lockers and cubbies housed in the multipurpose area. Smaller portable storage areas could be reconfigured to fit current usage needs.

The Community

This ideal school would not be separated from the community. It would be a part of the community, and the community would be part of the school. The school facilities would be equally shared between adults, children, and adolescents, and students would constantly use community facilities to carry out their learning projects. For example, adults would work in the shop at their own projects (such as, repairing snow machines and chainsaws, or building sleds) next to students who might either be assisting the adults and thus learning from them, or working on their own projects and receiving assistance from the adults. In the library area, adults might read, view a video film, use a computer, or even sew—again, either together with students or simply next to the students who work on their own projects, from time to time seeking the advice of the adults. Similarly, all other areas of the school would be used by students and adults together.

Students would be in the community to learn from and with adults. A small group of girls might visit a home to watch the tanning of hides, or sit and sew with an adult artist. Applied home economics might require one or more students to spend time taking care of the household needs of an elder. Students would go trapping; run dog teams; make traditional items; work in corporate, city, and health offices; attend meetings—in short, participate fully in the life of the community.

Of course, this intertwining of the school and the community would require a lot of planning, scheduling, monitoring, and coordinating. The community would need to feel almost total ownership of the school and be willing to regulate the use of school and community facilities in a way that would give priority to the education of the children. Educators and community members would need to communicate openly and frequently. The educators would have to give up their fear of losing control over the education of the children, the use of the school building, and the entire process of schooling. The current lines between school and community would definitely have to be erased.



The Ideal Day

So in this ideal school with this ideal curriculum, what would happen during any randomly selected ideal day? The following scenario considers a group of seventeen students, K-12:

At about 9 o'clock in the morning, students would gather in the library, each recording the time at which he or she arrived. These time records would be kept, increasing in complexity with grade level, in order to satisfy American institutional requirements as well as to help the students learn that some cultures and some employers pay a great deal of attention to clock times. The first activity of the day would consist of a general meeting of the teacher(s), students, and any others present to talk about events of the past day(s), the morning newscast, and events planned, both long term and for the specific day. General housekeeping matters would be taken care of. Then the students would work individually or in small groups on their ongoing projects and write in their journals, while the teacher would meet with individual students to review plans for the day. Students would have individual learning plans which outline broad objectives, and progress would be reviewed at least once a week. Most students, especially the younger ones, would also have daily or weekly work plans (contracts) which would be reviewed every day and revised as necessary.

After the students would have met with the teacher, they would either return to their ongoing projects or pursue other learning activities, either in school or in the community. These activities would be scheduled at the morning meeting, with the schedules including definite time and space arrangements and back-up plans. Teacher aides or adult volunteers would be available to help students carry out their daily work plans.

On this particular ideal day, one of the first graders brought to school a collection of frog eggs which he scooped out of a nearby stream. He presented his find at the morning meeting, and the teacher agreed to help all students who wished to know more about frogs. Since a group of primary students showed great interest, the teacher arranged a time for frog research right after the individual meetings.

During the frog research time, the students listed what they wished to know about frogs, and planned how to take care of the frogs and how to learn more about them. The teacher helped the students to find resource materials in the library, and she assisted them in writing a group-experience story, outlining the events and plans of the morning. The students then wrote/drew individual stories, made word-bank cards, and continued their research either individually or with friends. Within a week, the students were making books of frog stories, displays of the life cycle of frogs, folded paper frogs, a habitat for frogs in an aquarium, clay frogs, and various other artistic representations of frogs. They were telling frog jokes, singing frog songs, counting frog eggs, predicting how many tadpoles would hatch, playing leapfrog, looking at frog eggs under the microscope and drawing what they saw, and reading at least ten new "frog" words, even the kindergartners!

While the teacher worked with the frog research team, a group of intermediate students worked in and around the shop. Together with an aide and an interested community volunteer, they were assembling a small television broadcasting studio. This involved a number of different activities and educational objectives, ranging from basic skills (reading and following directions, computing and measuring, writing signs and scripts, figuring times and schedules) to higher level thinking skills (forecasting, planning, decision making, creative alternatives).

At the same time, the senior high school students were working on a family history project, which was to be presented in a museum display and in a broadcast by the TV studio. Some of the students spent most of the day interviewing members of the community, others using word processors to write first drafts of their presentations. One student worked in the photography lab developing pictures to illustrate his part of the presentation. Another completed an ERIC search (using a computer terminal and fax machine). At the end of the day, the students logged their progress and their times and either went home or continued with their projects. In this school, the school day and "free time" are not well distinguished, and many students continue on into the evening with their projects.

During the day, various adults were available as tutors and/or counselors of individual students. A variety of community members participated in gym activities that were available at various times throughout the day. For insurance reasons, these activities were supervised by a paid employee.

From Real to Ideal

The described scenario represents a community-integrated, student-centered, process-focused, project-oriented school as the ideal learning environment for rural Alaska. The existing educational system, however, is basically community-segregated, subject-focused, and product-oriented. In many cases a workbook or worksheet exercise represent the closest approximation to experiential learning. Therefore, the question is, how do we start from what we have to move in the direction of our ideal?

Some suggestions might be drawn from a paper by Helen Roberts titled "The Development of an Integrated Bilingual and Cross-Cultural Curriculum in an Arctic School District" (see this publication). In this paper, Roberts presents a triangular model of community development, curriculum development, and staff development, which definitely includes the necessary components for such a process of school adjustment. Unfortunately, the existing school system changes much more slowly than rural Alaskan communities do.

Once it has been decided that the educational system needs to be changed, it may be best to start initiating the changes in the area of community development. In community meetings, people could discuss ways of improving the education of the children. Advertise these meetings, offering refreshments and door prizes. Once people are attracted and realize that real change is about to happen, they will keep coming back. The ones who come back are your committee to plan and initiate the changes.

At the first community meeting, discuss the objectives of change by addressing questions such as what is happening now, what would be possible for the children to achieve, what do the parents want for their children. Let the community members discuss this and iron it out, but offer certain key ideas and moderate the discussion to lead it into the desired directions. Inform the community that the next meetings will present some ideas for improving the school for them to consider. Make them aware that they will be the ones who will have to decide which suggestions to use.

This process of community development will require a series of meetings. It may well take up to a year before the community is ready for any significant changes in the school. Small changes may occur sooner, but don't expect an overnight transformation.

While the community meetings are going on, educational leaders need to be visiting community members to talk about the proposed changes. A lot of personal footwork is needed to initiate a change in a small rural community where all social relationships are at the primary level and secondary roles are not easily distinguished from personalities and families.

While the community is discussing approaches to changing the school, similar efforts need to be made by the school staff. Staff members need to agree that change will happen, that they will participate in it, and that they will stay long enough to make the process effective (that is, to start and establish a new pattern). Staff members need to participate in the efforts at community development so that the community can "develop" the staff. Changing the educational system to fit the needs of rural communities is a two-way process of cultural transition. Most likely, the result of this process will fall somewhere between the two cultures, perhaps near the "ideal" described in this paper, or perhaps somewhere on either side of that ideal.

The third component of Roberts' triangular model of school adjustment is curriculum development. Community development and staff development are a part of curriculum development since the community and the school staff will jointly develop the goals of the curriculum. Educators will add specific learning objectives, but will cooperate with the community in establishing methods of implementing the goals and objectives of the curriculum.

The process of curriculum development is lengthy and intensive. It requires a lot of work outside the regular teaching day, and a lot of interaction between the community and the school staff. To insure that the curriculum is responsive to the needs of the community, this interface between the school and the community cannot stop once the curriculum is completed, but must continue while it is implemented and adjusted to the requirements of the changing educational system. Throughout this ongoing process, the community members must feel that they own and control the school, and the school staff must feel they are a part of the community. Given the close relationships existing in a small community and the intense interactions suggested by this model, disagreements, tiffs, and even feuds will be unavoidable. Therefore, there must be a forum and a process for working out such problems. A local school board or committee could constitute such a forum, provided it is awarded respect and authority by both the school and the community so that its decisions can become binding for both sides. This way disagreements could be avoided that cause one side to withdraw during the most crucial phases of the development process.

Summary

This paper points out that although the existing educational system is not always well suited to meet the needs of rural Alaskan communities, it is extremely hard to change. A model, or ideal school system for rural Alaska is described as one that fosters experiential learning through a process-focused, project-centered curriculum geared toward the development of individual students. The content of learning is categorized into four major areas: bioregional skills, cultural skills, communications skills, and personal survival skills. An integrated school-community relationship is described as one in which the school and community are closely intertwined while student learning is structured and monitored to insure mastery of skills. The paper includes a description of an ideal school facility to fit contemporary needs of rural Alaskan communities. A narrative of an "ideal day" illustrates how all elements of this ideal school system work together.

Finally, the paper includes suggestions for transforming the present school system. These suggestions address the transformation of individual schools in individual communities. It is assumed that such individual adjustments will eventually result in change of the entire educational system. It is emphasized that the adjustment process must be viewed as multi-directional process of cultural change which affects all parties involved. It is further pointed out that this process must be ongoing, continually adjusting the system to the changing needs of the people it serves. At any given moment along the continuum, the school system will differ from the ideal model in that it will reflect the combination of all the cultural forces at work at that time.

COMMUNITY PARTICIPATION IN RURAL EDUCATION

by
George Olanna
Shishmaref

The curriculum of a rural Alaskan school should be related to the local community and the local environment. The community should be a resource and should be involved in decisions regarding what will be taught in the school.

The students have to learn two cultures. We can neither go back in time and live only off the land nor can we live exclusively the Western lifestyle in our villages, where many of the things of Western culture are not available. Therefore, our students must first know their place in their communities. In addition, they must know where they are going; their world cannot stop in their communities. Some rural communities are changing rapidly. It is hard to predict what further changes will take place and how they will affect the communities. Of course, we could change the curriculum each time we see changes in the cultural pattern. But will this work?

I think, if we begin by looking at the traditional cultural values and expand from there, the education in our rural communities would improve. The students in rural areas have to know who they are before they can compare the outside world. Therefore, the teachers would have to know the local culture and understand it. A teacher who has no experience in rural cross-cultural education cannot provide rural Native students with the well-rounded education they need. On the other hand, a teacher who is trained in cultural studies will be able to assist the students in understanding the experiences which are part of their life in the community. In this way, teachers will be able to work with students in selecting what is best for their education. The students will be more motivated to learn if they understand why the school exists.

In today's rural education, teachers often feel that the students don't know much because the students' experiences are not taken into account. Students are taught what the teacher chooses, whether or not that fits the students' everyday life.

The bilingual/bicultural programs in most schools are not always used properly either. That is, they are not integrated into the curriculum. Instead, they are regarded as just another school subject. Ethnic studies should be at the core of the curriculum; they should be used to equip students with the tools for learning about the outside world. In elementary education, ethnic studies should integrate reading, writing, arithmetic, social studies, science, art, and language. In secondary education ethnic studies should include history, biology, literature, science, and vocational studies. In this way, the students would learn from their own experience and knowledge, and will expand this knowledge beyond the village context.

In secondary schools the students could be encouraged to attend school outside the community for one year. The main purpose of this would be to expose the students to other cultures and environments and to provide them with the experience of what it is like to live "away from home." In most villages, there are not enough jobs for all high school graduates. Students who have only attended village schools tend to stay in their community because they are unfamiliar with the world outside the village. If the subjects were taught with an approach that considers the students' experience, the students would be able to relate their studies to real-life situations. Such an approach would have to consider that in real life, we don't set aside a time each day to do math for 45 minutes or to socialize for half an hour, but that all of these activities are integrated in daily activities.

To develop a community-oriented curriculum, the community, teachers and administrators must be involved together. The curriculum developed by the Northwest Arctic School District (see Roberts, this publication) could be used as a model for an integrated curriculum development process. Workshops on curriculum development should be offered to anybody who participates in the educational process, such as parents, teachers, members of advisory committees, and school board members. As in the Northwest Arctic School District, there should be two advisory committees and a curriculum director. One advisory committee would be composed of professional school staff and the other of community members. There would have to be two-way communication between the community and the school district. In this way, the curriculum would be developed jointly with the community rather than just by outsiders. The curriculum should be supported by the community and the teachers. In-services on the curriculum should be held in each school for members of the advisory committees, teachers, administrators, and teacher aides.

The teachers in preschool and kindergarten should be trained in early childhood education. The school districts should offer such training programs as well as career ladders which would motivate the teachers to continue their training. The teachers in early childhood education should come from the community because the students are too young to accept a stranger. The teacher should be a "mother" or "father" figure during the first years of school. Early childhood education is a "stepping stone" for our children. Bilingual/bicultural studies should be included in the early education program. To some Native teachers it may seem to be too difficult for young children to learn two languages. However, there is much our children must learn and, therefore, they should be taught in both cultures from the beginning. We cannot escape the fact that we are living in two cultures. We have to honestly tell our students what will be expected of them and not try to hide it. Twelve years of schooling are too long for our students to finish not knowing what is expected of them.

The school should be required to teach the traditional Native values. Each school should hire or train teachers who understand these values. There are too many cases in which the students' behavior is punished by teachers or principals who have no idea why the student did what he or she did. To us, the traditional values are like the bible to Western culture. These values kept our culture alive before the bible was written. In today's education these values are not adequately taught. Our elders are no longer the "teachers", but have been replaced by teachers who know little about our values. Some of our traditional values have been identified by the NANA region. They are:

1. Knowledge of language
2. Sharing
3. Respect for others
4. Cooperation
5. Respect for Elders
6. Love for children
7. Hard work
8. Knowledge of family tree
9. Avoid conflict
10. Respect for nature
11. Spirituality
12. Humor
13. Family roles
14. Hunter success
15. Domestic skills
16. Humility
17. Responsibility to tribe

It is said that our Native world is simple but complex. We can understand each other without saying a lot. We learn by experience over many years. Our values fit the world we live in. Our educational system must be simple. We must learn from within, not from the outside.

Our world is dualistic, the world of Native culture and of Western culture. We cannot go back in time nor can we fully adopt the life of the Western world. In this sense, our culture is unique, so our education must be unique as well.

SECONDARY EDUCATION IN RURAL ALASKA

by
Pennee Reinhart
Kiana

> No culture will give popular nourishment and support to images or patterns which are alien to its dominant impulses and aspirations.
>
> Marshall McLuhan, *The Mechanical Bride*

> We need our curriculum planners to deliver an apologetic suited to the realities of our times. We must accept the fact that many of our traditional instructional forms have died of exhaustion. Misguided but undaunted, we continue to embalm them with sterile enthusiasm, paint them in gaudy colors and dress them in the latest pedagogical finery. We have become trained morticians of the mind who make pitiful attempts to give our corpses the illusion of life. We would serve our students far better if we would prop up our tired symbols and rituals and dance them one last jig over their graves. Then we should bury them with the one room schoolhouse and Dick and Jane readers.
>
> Peter McLaren, *Schooling as Ritual Performance*

Any discussion of current trends in secondary education must address the effect of the report of the National Commission on Excellence in Education.

The publication of *A Nation at Risk* in April 1983 has profoundly influenced decisions about education in rural Alaska. The commission recommends a curriculum that includes 4 years of English, 3 years of social studies, math, and science, and 1/2 year of computer science, as well as standardized testing of all students in these subjects. The report also calls for devoting significantly more to the "new basics," for using the existing school day more effectively, and for lengthening the school day or the school year. Another contention is that educational reforms, particularly those focusing on math, science, and computers, are essential to restoring the American economic position in the world.

Many school districts in Alaska are adopting these recommendations, making school administrators and teachers responsible for the education of students within the parameters of "excellence." Some of the issues raised by this trend will be discussed in this paper, especially curriculum, standardized tests, time devoted to education, and education as it relates to employment.

Curriculum

The reliance on the subject-oriented curriculum as it is currently implemented in rural Alaskan schools has been increased with the quest for "excellence." In all subjects, "the emphasis is on transmitting a predetermined body of knowledge or a particular set of skills from those who possess such knowledge or skills to those who do not. Thus, to a large extent in a subject-oriented curriculum, the learning process becomes subordinate to, or is determined by the nature of the content" (Barnhardt, this publication). Reducing the learning process to the acquisition of subject-matter skills contributes to maintaining a fragmented pattern of learning which frustrates the students needs for integration.

Success in school continues to consist largely of mastering skills and procedures that have little intrinsic meaning to the student. Teachers become both the diagnosticians and the surgeons, no matter how trivial, misconceived, and ultimately damaging the treatment might be, and the students remain the passive recipients of that treatment. If the bleeding does not seem to be restoring the patient to life, bleed some more. "The subject-oriented curriculum appears to be inadequate, in both content and process of , for the educational needs and circumstances of cultural minority students. The content is often divorced from the experiential and situational framework for the student, and the resultant process is usually culturally biased" (Barnhardt, this publication).

Standardized Tests

Students' scores on standardized tests have become the measurement of excellence in most rural Alaskan schools. According to the National Commission, educational excellence involves the teaching of higher-order intellectual skills, such as the ability to analyze facts, draw inferences, solve problems, and create concepts. Standardized tests do not measure creativity or problem-solving ability. What they do assess is the capacity to locate answers to predetermined questions. Rather than indicating what students know, test items serve to catalyze what is taught. The more decisions are based on test scores, the more teachers teach to the test. The more educators design curricula around standardized tests, the less teachers devote time or energy to the processes by which students acquire knowledge. This policy stifles many competent teachers with homogenized scope and sequence and monotonous instruction. As a result, mediocrity instead of excellence is promoted in our schools.

Time Devoted to Education

The National Commission on Excellence in Education has recommended that students in high school be assigned more homework, that the school day be increased to 7 hours, and that the school year be extended to at least 200 days, and possibly 220 days. The commission also advocates that learning time should be increased through better classroom management and more efficient organization of the school day and that additional time should be found to meet the special needs of slow learners, the gifted, and others who need more instructional diversity.

One of the presumptions of the commission has been that more time in school is the crucial factor in the apparently better academic performance of students in foreign countries, particularly Japan. Japan has a longer school day and school year than the United States. However, the performance patterns of Japanese students are divergent, suggesting that factors other than time are significant. Cultural differences influence school performance. The Japanese have extensive school solidarity, built upon student responsibility for cleaning buildings, serving meals, and attending school assemblies, which include inspirational songs and messages. Art and music are considered basic skills in Japan. Students work for the honor of their class, school, and family and endeavor to do well on the rigorous high school and university entrance examinations. There is a direct correlation between high scores on examinations and the attainment of high-paying jobs. The ends justify the means. This is clearly not the case in rural Alaska, nor for that matter in the rest of the United States. Doing well in school does not guarantee employment. Because of these cultural differences, emulating the Japanese system of education would be unrealistic.

It seems to be a trend in this country, including Alaska, to spend an inordinate amount of time and resources on the gifted and talented students and students who qualify for other special help and to ignore the average students who make up the majority of the population in schools. These students have no advocates and are virtually excluded from academic expectations. We have heeded the Commission's cry for devoting increased time to the exceptional, but in the process we are breaking the backbone of society by failing to educate the students who happen to fall in between.

Education and Employment

We have been led to believe that obtaining a good education will insure a rewarding occupation. That this is an erroneous assumption becomes evident in the following examination of labor statistics by Gross and Gross (1985): "In 1982 the Department of Labor ranked the number of actual job openings by category. These openings reflect turnover as well as net job growth. The top fifteen job categories, with a single exception, are ones that middle class parents hope their children will avoid… The economy will generate some 19 million new jobs between 1980 and 1990, about 3.5 million of which will be professional and technical. Low-wage, service and clerical work will account for almost 7 million new jobs. Far from a high-tech future demanding skilled labor, the new technologies seem to be reducing the skills needed for most kinds of work. For most, the future rests at the counter of McDonald's or K-Mart; or if one is interested in computers directly, as a $4/hour key punch operator, not a $25,000/year programmer or repair person" (p. 367).

There is no clear evidence of a shortage of qualified engineers or computer scientists. Perhaps the United States is experiencing high unemployment and low productivity, not because of a lack of a technically skilled work force, but because of a failure to modernize our industrial plants and a failure to educate the majority of our youth who previously have provided the impetus which has kept this country at the forefront of nations high in technology. We are speaking of that "average" student who is being by-passed on that long, arduous road to excellence.

Conclusions

"If an educational program is to become integrated with the cultural patterns of the surrounding community, then the goals, content, and structure of that program should reflect some form of experiential learning. Experiential learning goes beyond the scope of discovery or inquiry methods, by emphasizing direct involvement in real-life experiences, rather than simply 'learning by doing' in the context of a classroom" (Barnhardt, this publication). We are immersed in a time of change. We are leaving an age of industrialization and entering an age of information. Our concepts of what constitutes basic education need to be adjusted. Learning to deal with the ever changing world mandates that coping skills become basic. These include skills in health, nutrition, drug and alcohol education, and physical and psychological education. Decision making, a key to our development as individuals, should be the most important basic skill taught in school. For students to be able to solve problems and make decisions, it is essential that they learn how to predict and check the results of their actions, monitor their activities, and test reality. These abilities are crucial for effective thinking in any kind of learning situation, be it in the school or in the community.

American culture has been criticized for excessive individualism in lieu of collective commitment, cooperative behavior, and social responsibility. This philosophy is contrary to the world views of many minority cultures in Alaska. Eskimo children, for instance, are taught "never to make judgments that ignore others, that are not, really, part of a community's judgment. The emphasis is on 'us', as opposed to 'I'. It is dangerous, they learn, to cultivate oneself; true, one learns to distinguish one's own life from those of others, but with none of the intense psychological assertiveness, even imperialism, that some other American children generate" (Coles, 1977, p. 215). Schools in rural Alaska increasingly pressure students to prove their self-worth as measured by performance on standardized tests and competence in subject-oriented curriculum. With success becoming more and more dependent on these criteria, a growing portion of our school population will find themselves defined as failures. If the competencies taught in school were directed toward human sharing and collaborative work, and if individual achievement was viewed as serving collective interests and the welfare of the community, then experiential learning, rather than transmitting predigested content, could become a viable approach to education.

If excellence in Alaskan schools is to become an attainable reality, quality education for all students needs to be made into a priority. Since it is a slow process to raise overall achievement scores, many Alaskan educators have opted to select those students who are at the upper echelons of the achievement range and place a higher emphasis on their education at the expense of the other students.

When Peters and Waterman (1984) set out to look for excellence in corporate America, they found that excellent companies turned the average person into winners by designing systems to support and reinforce winning attitudes. The investigators also observed that less-than-excellent organizations viewed their workers negatively and designed systems that seemed to tear down their workers' self-image. Recognizing winners is a lot easier than creating them; however, to create winners should be the purpose of education. It is not the recognition of quality but the creation of quality that breeds excellence.

It is our responsibility as teachers in Alaska to bridge the gap between education in the classroom and the requirements for employment in society and to create a learning environment which prepares the majority of students for their roles as productive adults.

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REFLECTIONS ON TEACHING IN THE KUSKOKWIM DELTA

by
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Kasigluk

Eclectic is a wonderful word. Human beings, in our infinite variety, require eclectic institutions. All our institutions, including schools, are continually evolving as we balance the tidy ideas of what should be against the untidy reality of what is. To add to the confusion there are multiple perceptions of both.

Social institutions are like nuclear time bombs ticking in our midst. The professionals are forever tinkering to make them work better, and they tinker well. But for my safety and survival I had best concern myself with their purpose and the manner of their use. Likewise with education.

Every dedicated educator has his own vision of what schools should be. He can, and should, share this vision with colleagues, students, parents, and community. Everyone should know something of the capabilities and limitations of the tool we call school. But, in the end it is the community that must decide the purpose for which school exists. The community must take and shape the school so that it transmits the skills, knowledge, and values the community wishes to preserve from their own culture and those they wish to integrate from the dominant mainstream.

Barnhardt says, "...we will devise an eclectic approach which allows for minority selection and adaptation of those features which they deem most desirable ..." (see this publication). Those who doubt this can happen should look at the role of the churches in the Kuskokwim Delta. It is fashionable to mock the early missionaries, but it seems they must have done some things right. The churches today are integrated into the culture and community in a way that schools are not. Why? Perhaps there are lessons here for modern educators. For one thing, the early missionaries did not come with inward doubts and outward apologies. They came with absolute conviction, and they came to stay. They learned the language of the community—learned it well enough to teach their message in that language. Guilty they may later have been of efforts to suppress and supplant the language. In the beginning they learned it.

They began immediately to train native leaders to take their places. They did these things so well that today the churches seem the most "Yup'ik" institutions in the village. In the same way the school needs to be adopted, adapted, and integrated into the fabric of the village. Increasing numbers of native teachers can facilitate and accelerate this process. Knowing both worlds, they can help each understand the other to achieve consensus on the role and purpose of the school.

Scollons say, "Nearly everyone would say that the purpose of education is to prepare students for the world they will enter upon graduation. We all want students to have the knowledge and skills they will need to be mature, competent adults who have a range of options in employment or careers and who will be responsible, productive citizens" (see this publication). But what knowledge and what skills? Who will decide?

Roberts says, "...the emerging roles of the community vis a´ vis the school staff in the curriculum development process are those of goal setting vis a´ vis implementing education to reach those goals" (see this publication). Our school district already has in place both written statements of goals, and detailed curriculum guides, developed at great expense of time and funds, and approved by the school board. Administrative policy requires yearly time-lines and written weekly lesson plans showing how we intend to cover the required curriculum. "Cover" is the significant word here. On the one hand we have the administrations "need to know" that the curriculum is being "covered"—on the other hand are the real needs of real children. This is the problem with curriculum planning. No matter how much community input there has been, no matter how much skillful professional planning, a curriculum guide should be just that—a guide. We should not fall into the trap of allowing the tool to control the craftsman.

If you follow a good recipe accurately you can expect a perfect cake every time, but people are not cakes. Children learn in different ways, at different speeds. There are so many variables in the educational equation that there can be no one perfect recipe. A good curriculum guide is a very useful tool to have, particularly if it is developed with community involvement for a specific situation. Administrators do need to know that teachers are using this tool. But there is a vast difference between "covering" curricula and teaching children.

Perhaps here a distinction needs to be made on the basis of content.. I can see some justification for "covering" all the content of a high school course on ANCSA, even if some students do not understand the first lesson. In the area of basic skills, there is an inherent order to the subject matter. It is impossible to teach long division to a child who cannot subtract. Spelling is another good example of how the curriculum trap can lure a teacher into bad teaching practices. Spelling books are usually divided into thirty-six lessons. Obviously we must complete one lesson each week to "cover" the content. But what about the student who fails the first week's test, and the next, and the next? By the end of the school year he has "covered" the material, but what has he learned? How to fail? How to hate school?

In the Lower Kuskokwim School District the teacher is caught "between a rock and a hard place," between the demands of a very detailed curriculum and the varied learning styles and levels of real, individual children. The notion of accountability is good to the extent that it is evidence of parent and community interest in the educational process, but I see inherent dangers. Rote learning is easy to assess and measure. Creative processes are not. Consequently, an over-emphasis on accountability tends to encourage rote teaching at the expense of more nebulous problem solving experiences.

I like the Scollon's "Axe Handle Academy" curriculum. I think it would make an excellent foundation on which to build a high school curriculum that would be both open-ended and truly specific to our district. This being out of my control, I do intend to use, borrow and adapt many of their questions to my classroom. "Were the stars out last night?" is a wonderful "wake up" question for the bulletin board. Others are good starters for writing or learning center activities, or around which to build learning activity packets. To quote Scollons, "We need to prepare students by giving them a solid understanding of their place on the earth, their place and identity in society, and the ability to listen, observe, reflect and then communicate effectively with others. "

Weaving Curriculum Webs by Corwin, et al (see this publication), describes what can happen when a spider comes to school. One magical experience like this stands out in my memory. One glorious morning in Northeast Oregon, teacher and students were outside raising the flag and giving the Pledge of Allegiance. On this particular morning, our leader was a first grader—

probably mentally retarded, certainly language deprived, and being raised by a retarded mother and an alcoholic grandparent. As we finished the Pledge, Anita, standing by the flag pole facing the rest of us, pointed silently at the sky over our heads. We all turned and there, touched by the morning sun, outlined against the blue sky, were three geese flying in a perfect vee. We all watched until the geese turned to black specks and disappeared in the blue distance. Then the children turned spontaneously to Anita and thanked her for showing us this wonderful sight we would otherwise have missed. Geese kept coming up all day, in the children's writing, and in their art. One of the readers happened to have a story about an injured wild goose. The primary science lesson was on signs of autumn. Unanswered questions sent several students to the library. Beyond the curriculum webs we wove around the geese something magical happened to us as a group, because we had shared and valued that moment together, because the "least" of us had been our teacher.

I try always to remain alert and sensitive to moments like this. One device that helps me do this is to have the children spend the first five minutes of the day writing journal entries. By scanning these as I collect them and at morning break I can get a good indication of anything special that has engaged the children's interest. Of course, we can't wait for the spider to come to school. Bulletin boards, manipulatives, video tapes, music, field trips, mysteries, learning centers, projects, and activity packets are all efforts to provide the stimulus about which to weave relevant curriculum webs.

As much as I believe in flexible open-ended curricula and spontaneity, I also believe in structure, drill, and mastery learning. Teachers need to be well trained and well prepared. They need to know their subject matter thoroughly. Here is the place for the kind of curriculum guide our district is using, as a kind of check list for the teacher to use periodically to be certain that basic skills and knowledge are being mastered as we weave our relevant webs.

For my own use I write lesson plans somewhat differently from the ones I am required to submit to my administrator. I like to write individual prescriptive plans for each student at the beginning of the school year and at intervals throughout the year. If report cards are prepared on a nine-week basis, it usually works well to review these "IEP's" at the same time.

My prescriptive plan for each student will tell me where he is now in basic skills, in reading, math, English, spelling and handwriting, which skills he needs more practice with, and which he needs to learn next. For science, health, social studies, art, etc., I will write group plans but will also note individual weaknesses, and plan corrective activities in these areas. Learning centers and individualized activity packets allow for a range of interests, abilities, and learning styles.

Children like structure and predictability. They like to know what they are supposed to be doing at any given moment during the day. One system I like, and children seem to like, is to prepare daily lesson plans in the form of job tickets for each child. The student's job ticket will tell him what he is expected to complete during the day, what pages in reading and math, how many lines of handwriting, what spelling words to practice, and what his computer time will be. It will also specify group activities and a variety of options for free time.

It takes a while to prepare these job tickets every evening, and I have found it self-defeating to prepare them a day ahead, but the savings in teaching time in the classroom is invaluable, especially in the multi-graded classroom. This system helps students assume more responsibility for their own learning. A student can see exactly what he needs to get done, and can begin to learn how to budget his own time. After a few weeks on this system, students will begin to move independently from one activity to another without interrupting the group that is working with the teacher. If a child is stuck, he can flip up a "Help" sign on his desk, and move to another activity until the teacher is free to help him.

Independent and group activities are interspersed throughout the day. the trick is to keep drill and practice activities within achievable limits and always to include several open-ended "reward" activities so that students are neither bored nor frustrated, but spend a maximum amount of time in meaningful activities aimed at advancing them along the continuum of skills and knowledge set forth in the curriculum guide. There will be times during the day for whole-group activities, and times for the teacher to give individual help. Such a system provides both for the drill and practice necessary for true mastery of basic skills, and for challenge, variety and spontaneity within the structure.

I was very interested to hear one of the Rural Alaska Instructional Improvement Academy instructor's comment that we do our students a disservice by not helping them learn to concentrate in a noisy environment. This instructor was recommending that students read aloud to themselves from their computer screens as they practiced key-boarding and reading skills. It certainly worked for our adult group, each of us testifying that we could attend to our own voices and shut out our neighbors' as we read aloud and typed. Children too attend selectively and can learn to work efficiently in classrooms in which different activities are going forward concurrently.

Such a classroom may appear unorganized and noisy at first glance. But if the teacher knows the subject matter, and has planned well, continued observation will demonstrate that educational objectives are indeed being met in a positive learning environment in which students are learning how to learn.

An appropriate elementary school for the Kuskokwim Delta will be shaped by and integrated into the village. It will reflect the values, traditions, and skills selected and adapted by the village from the Native and mainstream cultures. Curriculum guides will be flexible, relevant and open-ended on the model of the Axe Handle Academy curriculum. Teachers, many of them Native, will be well trained and knowledgeable, sensitive to individual differences and cultural ambiance. These enthusiastic teachers will have high expectations of their students.

Teachers will stay flexible and alert for the "teachable moment", respect the interests of their students, and use every device and trick of their trade to make the skills and knowledge they are teaching relevant to the students' world. Teachers will be "learners" too and model the attitudes, processes, and skills that will make life-long learners of their students. There are ills in Western Alaska, as elsewhere, that the schools did not cause and cannot cure. Students who graduate from such a school will be part of the solution not the problem.

SOME THOUGHTS ON CURRICULUM

by
Marilyn Harmon
Kotzebue

Several years of teaching in the same grades—and in the lowest ones at that—sometimes cause me to lose sight of the whole school curriculum. I become quite an expert in my small area, but I miss the big picture. My experience could be compared to working in an assembly plant where one takes the pieces from the manufacturer and starts putting them together without ever asking what the end product will be.

One way of questioning curriculum is by asking what do we want to turn out at the end of our time with this child. My answer to this question would have to be based on my belief that the individual can make a difference in this world. Therefore, I would want the curriculum to contribute to individual students' sense of self-fulfillment, competence in decision making, and ability to engage in life-long learning. I believe that education should never limit students, but should alert them to their options and enable them to make choices. Therefore, the curriculum should focus on skills in decision making and on learning skills.

It seems that these educational goals could be best pursued with an approach to subject matter similar to that developed by Ron and Suzanne Scollon in "The Axe Handle Academy" (see this publication). Scollon and Scollon suggest that subject matter be organized around the following three areas: bioregional studies, cultural studies, and communication studies. Within these areas, students would learn to compare their own world of people and habitat with other worlds, to be able to better understand others and communicate effectively with them. This approach to teaching and learning may differ radically from the traditional subject-centered approach of the high school. However, it is very similar to what happens in most of the lower elementary grades. Most of our school day is spent in language and reading development. There is a strong emphasis on self-concept, communication and use of the environment. In the early elementary grades, the traditional subject areas are still integrated. Only as our students progress through the educational system does their learning become more and more centered around distinct subject categories. It could well be that early childhood education has been offering us a more effective educational model all along.

An important component of the curriculum content in rural Alaskan schools has to be the students' indigenous culture. Sometimes we "outsiders" seem to act as if this is an unusual idea. However, when I think of my own education in the Pacific Northwest, I remember that we celebrated our cultural holidays, that I learned about pioneers and studied what it would have been like to live long ago. I learned about my own culture. So why should it seem odd that rural students learn about berry picking, boating, ice fishing, caribou hunting, and whaling? We as outsiders may have to set aside some things from our own culture if they are not appropriate within the life style of the community. When I taught in an Inuit village in Canada, I celebrated the community's holidays in the school and cooked turkey on the holiday. However, I didn't impose my cultural celebration on the students in my classroom. Obviously, Alaska celebrates Thanksgiving, but we may find parts of the Western culture that do not fit into the village life style. The curriculum of rural schools should reflect the community's perspectives rather than the educators' background.

So often we educators are setting ourselves up as the sole and final authority and source of knowledge, instead of encouraging our students to gather information from their own environment and to control their own learning. For far too long, villages have relied on the decisions of educated outsiders. An unquestioned acceptance of externally imposed institutions has seemed to prevail. Decision making has been taken away from rural people by a process in which each organization has upheld what it knows best. This, of course, is not solely a problem of Native villages. We in the Western world often feel at the mercy of doctors, teachers, and politicians as well. Therefore, students need to learn that education can give them better decision-making skills, but that it is not infallible and that it is an ongoing process of lifelong learning. A process-oriented curriculum, rather than the existing subject-oriented curriculum, may be more conducive to developing in the students the skills for thinking and continuous learning.

Another aspect of the curriculum is relevance. Each activity, project, or bit of information must relate to something the student already knows, so there is a purpose for learning. For example, as educators we may have many reasons why a first grader should sound out words. However, if the child does not view this skill as necessary, we are fighting an uphill battle. Teachers from suburban backgrounds may be accustomed to children coming from homes in which newspapers lay around, parents read to their children, and road signs and billboards are a part of everyday life. These same teachers may feel overwhelmed when they find that in a rural classroom, they must provide a reason for reading by showing their students the relationship between reading and the world around them. This is why I chose the community store as a place for my reading unit. Where else in the village could I find as many words and as many reasons for reading words? In addition, I found that directions for toys or food recipes increased my students' interest in reading. Last year, I passed out a little toy puzzle. A kindergartner figured it out first because he read the directions that came with it. He was very excited about his discovery and spontaneously shared with his peers that he had figured out the secret by reading. After all, isn't that why we learned to read, or tie our shoes, or anything else? We saw someone else doing it and saw value in it for us.

So far, I have pointed out that an improved curriculum should focus on the process of learning and incorporate reasons for learning. Now I will have to decide how this should be accomplished. Every student has a specific way of learning that best suits him or her. Learning may be approached primarily through visual or auditory or kinesthetic modes. Most of us learn best when these approaches are combined, even though we may lean toward one or the other. I have found that many of my students in the village tend to do better when using kinesthetic and visual modes of learning. Therefore, if I rely completely on an auditory approach, I'm bound to fail and will probably end up diagnosing my class as "dumb" or "slow." On the other hand, If I use another learning modality, I may well find reason to judge those same students as "bright" and "fast."

I am afraid I had to discover this the hard way. When I taught in a village for the first time, I was given a certain reading program, which I followed faithfully instead of analyzing my students' strengths and abilities and developing an appropriate approach. As a result, all the children in my class flunked the placement test. As I continued to teach the program, the same concepts and skills were reinforced 100 times. However, when the students had to apply these concepts and skills in the achievement tests, everyone failed. At this point, I began to ask why the students had missed concepts that had been taught repeatedly. The students had given me the verbal cues required by the program. However, they had not really learned the concepts. Gradually I came to understand that the students had not been able to internalize the concepts because they had not seen them in different contexts and had not acquired them in a learning modality suited to their strength.

In another year, I worked with a different reading series which started out with nursery rhymes in kindergarten. I tried and tried by using pictures and saying the rhyme over and over. Nothing I did seemed to work to get the kids to repeat that four-line poem. I gave up and decided that it was just too difficult to teach the kids a poem that had no meaning for them because it was not reinforced by the culture of the home. The next year, I happened to sing a rhyme. With seemingly little effort, the students learned the rhyme and loved it. After that, I kept increasing the number of rhymes we learned because I felt that rhymes were a good means for teaching the students the English language patterns. We ended up working at a new rhyme almost every week, singing them all, and looking at related pictures and reading the words. Sometimes, we also did art projects pertaining to our rhymes. As the year progressed, I asked what part of school my students liked best. I expected to hear P.E. or computers or playing in the playhouse, but the students invariably referred to the nursery rhymes as a favorite part of school. These were students from the same background as those I had so much trouble teaching to read. The only thing that was different was that I had changed my teaching method.

In situations like this, a project approach can be very useful because it allows the students to apply varying learning modalities and pursue different interests within the same framework. In addition, the goal of wanting to accomplish the project adds meaning and reason to the students' learning efforts. For a project to be successful, a goal must be established, information needs to be gathered and organized, and decisions on what is important to the goal and on how to achieve it must be made. All of this should be done by the students, with guidance from the teacher, so that they can develop the learning and thinking skills that are the main thrust behind our curriculum.

As has already been pointed out, the main goal of this curriculum is to enable the students to make appropriate choices in their adult lives. Society is a complex and ever changing system, requiring constant adaptation and decision-making. Again I will try to illustrate this by looking at how my own educational and cultural background has affected my life's decisions. What is the normal person doing in my home town? They are probably married, have 3 to 4 kids, live in families in which both husband and wife work, and own a ranch-style house with a station wagon in the driveway. They chose that life style, but I chose differently by teaching in rural Alaska. Some people back in my home town have decided that I'm crazy, while others have envied me. How did I make the decisions that brought me this far? They were, indeed, influenced by what I learned from my home, my school, and my community. School gave me information about my local culture and about the larger communities of my country and of the world. It provided me with the skills I needed to decide whether to go out into the "world" immediately after finishing high school or whether to further my education in college. College opened my eyes to a greater variety of options and it allowed me to discover my special interests. Education became one of those interests.

I first taught school in my own culture. Then I had an opportunity to teach Inuit people in Canada. There I learned to appreciate the Eskimo culture and I chose to live and work among the Inupiaq people. With each of these decisions, I chose what I wanted out of life. I realize that I gave up some of the ways of my own culture by living in another. This is why I feel lost when I hit the smog-filled asphalt streets and see people hurrying by. However, I feel that I can choose to hang on to those parts of my culture that I like and let go of others that I don't value as highly.

I hope that our high school graduates will be able to choose in much the same way. I hope that they will be able to decide whether to use their skills in their own community or elsewhere. And I hope that their education will enable them to realize their impact on the world and to recognize the world's place in their lives.

Section II

SOME SUGGESTIONS FOR THE CURRICULUM

The essays in this seciton reflect the integration of some of the thoughts outlined by teachers in the previous section into specific curriculum units applicable to rural schools in Alaska. While the applicability of some of the curriculum units is not restricted to rural schools, they are all designed to help students learn the skills they need to survive in the changing world in which they live. The structure of schooling and the methods of teaching reflected in these units are as important as the subject matter being presented.

RABBIT SNARING AND LANGUAGE ARTS

by
Judy Hoeldt
Kaltag

The following teaching unit on rabbit snaring is based on notions of prior knowledge and student participation, because in a rural classroom, instruction must build upon the students cultural background and the knowledge they bring with them. The teaching unit employs a process-oriented approach to curriculum and a project-centered approach to teaching and learning. The unit is aimed at the early elementary level and incorporates the following subject areas: language, math, science, art, writing, and social studies.

The practices that will be described are based on the theme of connecting oral and written language and reading. All of the ideas build upon the student's prior experiences in order to advance the children's reading and writing skills to foster their language development. Perhaps the greatest advantage of this approach is that the teacher serves as a facilitator, encouraging the students to explore their creativity, to discover their environment, and to apply their problem-solving skills. I believe that this unit will foster student learning by building on the students' cultural background. In addition, these lessons will encourage students to develop their individual learning methods to accomplish educational goals that cannot be achieved through a structured, traditional, subject-oriented curriculum. In all of the following methods and techniques for teaching reading and writing, the student is the "doer." There is complete student involvement in each of these activities.

I plan on teaching several different units in the kindergarten-first grade classroom throughout the year. All of these units will be centered around pattern books; books written by students; independent reading; and group discussion before, during, and after reading. In the past, I've done a lot of writing with my students—now I want to take that writing a step further and have the students use their own inventive spelling and read their own writing. This year, my role as a teacher will be that of a facilitator and an observer. My students will be helping each other in the roles of peer tutors. I wish school started tomorrow for I have several units and projects I want to explore with my students.

I intend to teach my students a unit on rabbit snaring. I chose this particular unit because my prior knowledge on this subject matter is very limited. Therefore, the unit will offer a challenge for both my students and me to research and explore the different aspects of the subject matter together. I'm an enthusiastic teacher and a dedicated learner, and I hope that this enthusiasm and dedication will spread to the students throughout the unit. My intentions are to develop the students' writing, reading, and language skills with this unit. This can be done through different activities such as reading stories about rabbits and snares, writing our own hunting stories, writing creative rabbit stories, discussing the uses of snares and rabbits, identifying rabbit tracks, making our own footprints, drawing pictures of rabbits, participating in hunting trips and field trips, and making rabbits out of different art materials.

As resources I will be using some of the Native trappers in the village, several books (from science books to pattern books), materials for rabbit snares, audio-video equipment, outdoor environments, writing and book-making materials, and art supplies. My students and I will be visiting trappers, going on field trips to look for rabbit tracks, making rabbit snares, writing recipe books for preparing rabbit dishes, studying biology books, interviewing family members about rabbit snaring, and reading our "Big Book."

UNIT ON RABBIT SNARING

1. LESSON

Objective:	To determine the students' prior knowledge of rabbit snaring. To familiarize the students with rabbit snaring materials.
Resources:	Wiring for rabbit snare and pictures of rabbits.
Lesson:	Students will be in groups of four and five investigating wiring used for rabbit snares. Students will ask each other questions. After student groups have discussions about the wiring and its uses, the teacher will encourage each group to brainstorm different possibilities of using the wiring. The teacher will write student ideas on the board showing each group pictures of rabbit snares and rabbits. The teacher will guide the discussion using the following three steps: first, asking students, What to do you think of...?, What might you see, hear, feel...?, What might be going on...?; second, having students think about their response (What made you say that...?); and third, asking students if they have any new ideas. After these group discussions, students will ask questions about what they want to learn about rabbit snaring. The teacher will write the questions on a chart and the students and teacher will read the questions.
Evaluation:	After mapping out the students' responses, adjust instruction accordingly.

2. LESSON

Objective:	Students will participate in making a snare. Students will observe how the snare operates and comprehend how it is part of their culture.
Resources:	Snare equipment, local hunter, teacher aide.
Preparation:	Visits with the local trapper asking him to demonstrate a rabbit snare and to tell stories about rabbit snaring.

Lesson: Local trapper will arrange students around him in his home so all the students can observe the demonstration and listen to stories. Local trapper will show how to make a snare, where to place it, how it works, how it is set up, etc. After the demonstration, students will make their own snares with assistance from several local trappers. When the students have completed this task, the local trapper will share stories about experiences with rabbit snaring. Students will ask questions about snaring.

Evaluation: Teacher will record which students were successful in making rabbit snares. This record will be useful to designate peer tutors later.

3. LESSON

Objective: Students will get acquainted with rabbit habitat.

Resources: Film from state library, film projector, books on rabbit habitat.

Lesson: After watching the movie, students will join in groups and ask each other questions. The teacher will facilitate by asking questions from the focus unit on the basic story. Some of these questions would be: Where do you think this film took place? What time of year is it? What did they do first in the movie? What happens later? Students can be offered the opportunity to role play a trapper snaring rabbits. Then students can draw pictures of themselves snaring rabbits. Students can use inventive spelling to write about what is happening in their picture.

In the next step, the teacher will read a story about what rabbits eat and where they live. Before listening to the story, students will predict its content. The teacher will write student predictions on a chart where they will be checked off during the reading. After the students have discovered a certain amount of information, they will relate these facts to the teacher who will print them on a "big book." When reading is completed, the students and the teacher enter more information in the "big book." Then the teacher and the students will read the "big book" together.

Now the students will join in groups discussing and drawing two more pictures for their picture book on rabbits. One picture will feature the rabbit in its habitat and the other showing the rabbit eating—inventive spelling will go below each picture. After this activity, the teacher will lead a group discussion, reading the questions on the chart and determining which questions were answered and then writing the answers on the chart.

Evaluation: As an observer, the teacher will record student responses during discussions, and check student progress in reading along in the "big book."

4. LESSON

Objective: Students will research and explore subject matter in many books.

Resources: Several books on rabbits.

Lesson: The teacher will encourage students to check out and read different rabbit books and to share and discuss the books. Then the teacher and the students will discuss the students' discoveries and questions and enter them into the question chart.

Now, teacher and students will read two more segments on the habits of rabbits, their physical characteristics, and their reproduction, using the same format as before—predicting, questioning, and recording facts in the "big book." Then theteacher and students will read the "big book" together, possibly several times.

Evaluation: Teacher's observation of student participation in group discussion and of students' ability to read along in the "big book."

5. LESSON

Objective: Students will identify rabbit footprints. Students will make their own footprints.

Resources: Clay, paint, book on rabbit footprints, shallow pans, sponges.

Lesson: The students will view rabbit footprints, then duplicate footprint patterns on paper and in clay. Now, students will take turns stepping into shallow pans with paint and printing their own footprints on butcher paper. The students will write their names next to their footprints which will be displayed on the classroom walls. As a whole class, they will create a poem about footprints. The teacher will give a starting line and the students can brainstorm about the rest. The teacher will write the poem on a chart and the class will read it together on a daily basis.

Evaluation: Observation of rabbit tracks made in the clay.

6. LESSON

Objective: Students will draw a community trapping expedition and write an accompanying story.

Resources: Butcher paper, markers.

Lesson: Each student will use a certain area on the butcher paper to draw a scene of themselves and their elders trapping rabbits. After the mural is completed the students will write their inventive spelling sentences below their drawings to tell the viewers what is happening. The mural will be hung in the hallway.

Evaluation: Analyze the students' association between picture and writing.

7. LESSON

Objective: Students will practice making wire snares.

Resources: Enough wiring for all students, rabbit pattern, cotton and glue.

Lesson: Previous arrangements will have been made with the junior high teacher and sufficient time scheduled for this event. Junior high boys will demonstrate and talk about the making of a snare. The junior high boys will assist the kindergarten and first grade students as they are making a snare. After each student has completed the rabbit snare, the junior high boys will demonstrate how to use snares and where to put them. After the boys' demonstration, students will ask questions. Then the students will write about the project using their inventive spelling and draw pictures to go along with the writing. An art project to go along with the lesson can be cutting out a rabbit pattern and gluing cotton balls to it.

Evaluation: Examine the quality of the snares.

8. LESSON

Objective: To expose students to the Native language and to Native stories.

Lesson: The bilingual teacher will practice with the students the Native word for rabbit and snare. Then s/he will tell stories about rabbit snaring and explain that it is part of the community's subsistence way of living. After this, the students will discuss in groups and will add more information to the "Big Book." Rabbit patterns and fasteners will be available for students to make swinging rabbits.

Evaluation: Students usage of Native words and the retelling of the Native stories.

9. LESSON

Objective: Students will set up snares for rabbits and identify rabbit tracks.

Preparation: Arrangements through the principal and the trappers for a field trip to set up rabbit snares.

Lesson: Students will take their rabbit snares and follow trappers to set up the snares. Students will be looking for rabbit tracks. Students will be silent to demonstrate their respect for the hunt. Trappers will show students where and how the snares need to be set up. Students will follow the trappers' order in setting up their traps. Arrangements will be made with the trapper for the students to check traps.

After the field trip, students will write thank you notes to the trappers and ask them when they need to check their snares.

Evaluation: Students ability to set up snares and quality of writing in theirthank you notes.

10. LESSON

Objective: Students will check rabbit snares.

Resources: Trappers

Preparation: Arrangements with trappers to accompany us on our trip to check the rabbit snares.

Lesson: The students will draw a map of the area where they set up their snares before we set out to check them. The trappers will show students how to find the snares, how to repair the snares, and how to release the rabbits. Then the trapperswill take the students to their homes and show them how to skin the rabbits and how to prepare them for eating. The students will write stories about their trapping experiences and draw pictures of their trapping excursion. The students will read their stories and ask each other questions. The students' stories and pictures will be displayed on the wall.

Evaluation: Students participation in activities and evaluation of trapping stories for content and reading ability.

11. LESSON

Objective: Students will create and write invitations and make necessary arrangements for a potlatch.

Resources: Invitation cards and materials to make bunny-ear hats.

Preparation: Inform the principal about the potlatch.

Lesson: The students and teacher will make plans for the potlatch.

1. Who should we invite? Write names of local trappers on the board and assign each student to one name.
2. What should our parents bring? Write a list on the board and assign a dish to each student.
3. What should we write on the invitation card?
    a. time
    b. place

Students will now write two invitation cards—one to a trapper or community member and one to a parent. In the card for the parents, the student will ask for a dish for the potlatch. Students will decorate their invitation cards and deliver them. Students will make bunny-ear hats and other decorations for the potlatch.

Evaluation: Observe students' decision making skills and the readability of invitation cards.

12. LESSON

Objective: Students will be able to measure ingredients and read recipes for a rabbit dish.

Resources: Cookbooks, recipes, rabbit, skillet and necessary ingredients.

Preparation: Students bring Mom's, Grandma's or Auntie's best recipe for rabbit stew.

Lesson: The teacher and students will read the recipes together, select one, write it on a chart and talk about the measurements on the recipe. Students will try to figure out words that have been masked on recipe chart. As a sequencing task students will discuss in groups what needs to be done first, second, etc. Before cooking starts, the students and teacher will play a little game called "What If." In this game the teacher asks the students to imagine what would happen if the various cooking steps were carried out in a different order or what would happen if something was left out. Then the students will cook the rabbit, following the directions.

Evaluation: Students ability to measure, read, and sequence. Also, seeing how the rabbit turned out!

After the rabbit is cooked, students will make all the necessary arrangements for the potlatch. Each group will be responsible for one aspect of the potlatch. After the trappers and parents have arrived, students will thank the trappers and then recite their rabbit poems and read the "Big Book." The students' picture books and their trapping stories will be on display for everyone to see.

I will determine what my students have learned through this unit by evaluating their progress in writing and inventive spelling. This is a rough sketch of a unit and many more reading and writing skills will be addressed than could be included here. For example, I expect my students to ask for the correct spelling of the word "trapping" when they write on the mural. Through close observation, I will be able to tell which skills my students will be ready to learn and will then incorporate these skills in my lessons.

In reading the "Big Book" I will use word cards and sentence strips which will help me to evaluate whether the students are learning the words in the book. By masking certain words in the "Big Book" I will be able to tell whether the students have learned to infer these words by using contextual clues and phonic skills. However, the best approach to determining what my students have learned will be my own observations.

The above teaching unit will be accompanied by several classroom activities that are unrelated to the subject matter of the unit. One of these activities will be dialogue journals in which the students write to the teacher about anything they want to share. Another activity will be called "word-a-day." In this activity, the students pick out a word they want to learn and the teacher spells out the word for the students. Then they copy it and it becomes their word. After the students have gathered a certain amount of personal words, they read their words to their group and trade them with group members. Sometimes word cards are mixed and the students sort out the cards with their personal words before reading them to each other and placing them in a personal file.

While designing this unit, I asked myself whether it was culturally acceptable for girls to learn the art of rabbit snaring and for boys to learn how to cook. However, I came to the conclusion that this question will have to be asked in each community, since what is acceptable will vary from place to place. The unit is filled with so many reading, writing and other activities that it should be beneficial to all students.

A SENIOR RESEARCH PROJECT FOR RURAL HIGH SCHOOLS

by
Dave Ringle
St. Mary's

The English language curriculum of many high schools includes a term paper which students complete during their senior year. Seniors in village high schools often find it difficult to select a topic for their paper that can be sufficiently researched with the limited resources available in the village. In addition, many students, especially those not wanting to continue their education, find it hard to become interested in the project. However, recently the teacher for Native studies in our high school, who is also the general manager of the local Native corporation, introduced me to the I-search concept of the writing consortium for this assignment. This innovation has not only changed the nature of the term paper, but has also produced amazing results.

The research/I-search project was originally meant to focus on skills in researching, organizing, and writing a term paper. However, in implementing the concept, I found that the students also acquired new skills in many areas of verbal communication. For example, they learned how to conduct interviews and telephone conversations and how to cooperate with each other. In addition, the students expanded their computer skills as they revised their term papers. Yet, the area in which the students gained the most is the realm of personal growth as it relates to the students' self image and to their future plans. In a way in which no teacher could have done it, the research/I-search paper opened a completely new world of careers to the high school seniors.

I believe that every course taught during the senior year of high school should emphasize the question, "What are you going to do with your skills in the future?" All seniors are worried about the future, and many Native students are concerned about the fact that non-Natives hold most of the important and well-paying jobs in their village. However, most students take no steps toward ending their community's dependence on outsiders. This problem is directly addressed by the senior I-search project.

During the first semester, students focused on developing writing skills, exploring career opportunities (e.g. talking with successful Natives) and familiarizing themselves with Native issues including ANCSA. At the beginning of the second semester, I assigned the research project as follows: (1) Make a list of all non-Natives who work in the village, (2) determine what qualifications are necessary for Natives to attain these positions, and (3) develop a plan for yourself or Natives in general to gain the skills, experience, and attitudes necessary to assume these positions. The result of this project was to be a ten-page, typewritten paper with documentation in the form of footnotes and a bibliography.

Even though the students were initially overwhelmed by this assignment, many were aware that the topic addressed an issue that of deep concern to their cultural pride and heritage. The seniors worked on the assignment for two months during which I instructed each student in the specific steps he or she needed to follow. Especially, I pointed out that a term paper must be approached with planning and time management and cannot be thrown together in one night. The first task of this project was for the students to list the jobs held by non-Natives in the village. When the students were working on this task, I asked them to also find out what qualifications are necessary for these jobs.

Most seniors are well aware of the presence of non-Natives in the community's cash economy. However, when questioned about qualifications for wage-earning jobs, the students often responded by referring to generalities about education and training. Therefore, I talked about work habits such as punctuality, dependability, and politeness. I kept emphasizing that these qualities may be expected of the students by their future employers, a fact of which only a few were aware. The students organized the information they acquired during this first step of the project by discussing it with others and through "mapping" and "bubbling." Then they utilized these ideas to develop a tentative outline for the term paper.

After completing this first task, the seniors needed to research the topics included in their outline. Very few of the resources necessary for carrying out this step were in the library. Career encyclopedias were helpful and I encouraged their usage. Sometimes the students discovered that the information they found was outdated. For example, several students listed the average teacher income as being $8,000 to $10,000. Whey they updated these figures they learned a valuable lesson about the changing nature of society and about the myth that all information in a book must be true. However, most of the information for this assignment could not be found in books. Therefore, the students had to go around the village and interview adults.

The students took different approaches to this task. For example, some grouped together and divided the total number of necessary interviews among group members. At first the interviewing process was slow. The students were reluctant to call village adults and discouraged when people were too busy to talk to them immediately. However, eventually most students were successful in scheduling interviews and were well received in the village. During and after the interviews, the students took notes which they then compared with the notes of other students who had interviewed different people with similar occupations.

The benefits of this interviewing process were manifold, especially when the exercise was carried out in groups. The cooperation among the students created an atmosphere of "positive peer pressure" which seemed to reduce stress and anxiety. Questioned on the thoroughness of their research by peers, most students developed skills in note taking and in stating information accurately. The interviewing process also contributed much to increasing the students' self-confidence. In addition, the task opened new channels of communication between the school and the village and between younger and older people in the community. While all this took place, I tried to interfere as little as possible.

This research part of the assignment brought the students more into the world of work and higher education than any lecture could. The students learned about a variety of work-related topics, such as the difference between a bachelors and a masters degree, jobs that require academic or vocational training, and relationships at the work place. Most students commented on how much training was required for many jobs. While many seniors had been considering future education, they became more motivated and better oriented in their future plans by completing this assignment.

While these research activities can greatly contribute to stimulating student interest, one has to keep in mind that they are very time consuming and that deadlines are necessary to keep the students from procrastinating. Two weeks seem to be an ideal time frame. A simple method for the teacher to keep track of student progress is by asking the students to record interview data on note cards. These note cards become a very helpful tool during the next step of the project—the actual writing of the paper.

After the students had become interested in the project through conducting the interviews, they found the writing task less intimidating. Since there was no shortage of facts, the students could plunge into writing a rough draft with only minimal help from the teacher. However, most of the seniors were confused about how to write introductions and conclusions. Therefore, it seemed advisable to review the essay structure after the research part of the assignment had been completed. This review helped the students to avoid one of the most common weaknesses of research papers, which is a simple listing of facts without analysis.

I began this essay review by reminding the students of the original assignment, emphasizing that the third part consisted of the question, "What would it take for Natives to replace non-Natives in village jobs?" This reminder helped the students to develop a notion of purpose and a direction for their writing. Some began to write by presenting an overview of current village conditions. Others focused on Native pride. Still others outlined a Utopian vision of village life. Many students unconsciously developed a thesis statement as they analyzed their information in the process of writing. By the time the students handed in their rough drafts, they had analyzed and organized their data and only needed to refine the structure to accomplish the final draft of their papers.

It must be pointed out that it is important that the students complete this assignment. Some may take as much as two weeks to write the rough draft and another two weeks to edit the paper and to add the bibliography and the footnotes. However, this process introduces the students to important aspects of college-level training that they will need if they want to take over the jobs about which they are writing. As the students restructure their papers for the final draft, they learn new computer skills such as moving paragraphs, adding statistics, and using proper formats. The result is a piece of writing any senior can be proud of.

The final step in this project would be the publication of the student papers. However, it is very difficult to publish such a large amount of writing. On the other hand, publishing only a few papers would mean singling out individual students and exposing both the strengths and weaknesses of their work. An alternative approach is to ask a teacher who has not been directly involved in the project to choose the best parts of several papers and combine them on a computer file. The students can then edit and organize these excerpts and submit the final result to the local newspaper with a cover letter. In this way, the seniors will have not only their individual papers as an outcome of the project but also a final group paper which will have been published as a newspaper feature.

This research/I-search paper is an ambitious project. It can only be attempted after students have developed confidence in their writing skills and a wide range of writing abilities. I would suggest implementing the project during the final semester of senior English, when the assignment can represent both a culmination of high school education and a beacon directing students toward future goals. The project tries to relate the students' education in school to their lives in the village. Viewed as an English project, the assignment produces the tangible result of a paper. However, as much of rural education, this project also contributes to the accomplishment of a more intangible goal: graduates who can be competent adults, contributing to the betterment of Native village life.

CURRICULUM PROJECTS FOR THE PACIFIC REGION

by
Roberta Hogue Davis
College

The purpose of this paper is to present a third-grade curriculum that integrates information about the Pacific Region with existing curriculum goals. This Pacific Region unit will include project-centered activities that will seek to develop in the students skills for acquiring and utilizing knowledge. In this way, the learning unit will serve to incorporate process learning with the learning of specific facts as they are presented in regular classroom lessons.

The Pacific Region unit will center on three major class projects that will focus on our school's participation in the Sister School Exchange Program and in the Australaska Writing Project. Both programs were developed by the Alaska Department of Education to encourage interaction between students from Alaska and countries of the Pacific Region. With the Sister School Exchange Program, DOE provides initial organizational assistance for Alaskan schools wishing to establish communication exchanges with schools in China. Australaska Writing Project provides a telecommunication network through which students in Alaska can exchange written messages with students in Australia.

Project One: Producing a Video Documentary

The first project of this teaching unit consists of the production of a video documentary of our class to be sent to our sister school in Harbin, China and to the class of our Australian pen pals.

By writing and filming the documentary, students will develop skills in speaking and listening, writing and composing as well as in creative thinking. In addition, the students will expand their abilities to communicate and cooperate in small groups. Seeing their thoughts actually recorded on videotape will enhance the students self-esteem. Critical analysis of television programming will be incorporated into the video project. The project also provides an opportunity for involving the community in school-based activities.

Young students using video equipment will need supervision and guidance as they develop independence. The stated purpose of the project, skeleton plot, and exploration questions will be the main pre-organizational components that the teacher will bring into the class discussion. In addition, the teacher will need to introduce the class to various camera techniques and assist the students in editing and videotape.

Stated Purpose of the Video Project:

1. To introduce ourselves to our pen pals in China and Australia.
2. To describe the daily life of a third grader in an American classroom.

Basic Plot:

The documentary will open by showing the students arriving in front of the school. The following scenes will depict a group of students walking into the school building and into their classrooms. Each student and the teacher will be introduced by name, age, and special characteristics. Then, the documentary will present scenes from a typical school day. These scenes will be accompanied by students' comments. The production will close with a shot of the students holding up signs with written messages of farewell.

Discussion Questions:

The following discussion questions should help the students to determine what they wish to include in each scene of the documentary. After discussing these questions, the students could develop story boards to assist the production crews in filming the various scenes.

Story boards tell the film plot with pencil sketches of the scenes, instructions for the camera crew, and written dialogues for the actors. Third graders may find it difficult to produce these complex manuals. Possibly, small-group or teacher-directed activities will facilitate the concept. The teacher-generated discussion questions will address the following topics:

1. Who should be filmed in the opening scenes?
2. Should any special school personnel (e.g. principal, office staff, custodians, etc.) be introduced while the students are walking to the classroom?
3. How should each student be introduced? (Discuss using pixilation as a form of animation that would allow us to introduce several small groups of students at a time.)
4. What special characteristics of themselves would the actors of the first scenes like to share with the audience?
5. What activities should be filmed? Should we film class sessions on all subject areas or should we just film scenes from our own classroom and from some special activities?
6. Should we present the information in the form of a story (e.g., a new student is introduced to classroom routines) or just in the form of several loosely connected scenes?
7. What should we say?
8. How can we show the concept of time passing?
9. What should we film out of doors?
10. Should we try to sing a special song or show a special game?
11. Should we refer to the other classes in the school?

Camera Techniques:

The following camera angles will be demonstrated to and practiced by the students: long (whole body), medium (waist up); close-up (face), extreme close-up (e.g. nose, shoe, hand, etc.), panning (moving the camera slowly), over the shoulder (the camera is positioned behind the subject), zoom (lens is used to go from a long shot to a closer shot), low angle (camera is place below the subject), high angle (camera is placed above the subject). While practicing with the video camera, the students will be asked to view television shows for camera angles and other techniques. In class, students will discuss the reality or fantasy of television programming. This process should contribute to developing in the students the analytical skills that will allow them to view television programs more critically.

Community Involvement:

The video project offers various opportunities for interactions between the students and the community. Field trips to a local broadcasting or cable station could be arranged to provide the students with additional background information. Possibly, the local television station (if available) would agree to air the documentary as part of a public service promotional. Parents and other community members could be invited to a special opening night for the production. Students may also want to make copies of the documentary to show to their friends and families. Furthermore, after producing this first documentary, the students may want to explore a community issue in another video project.

Project Two: Learning about the Cultures and the Peoples of China

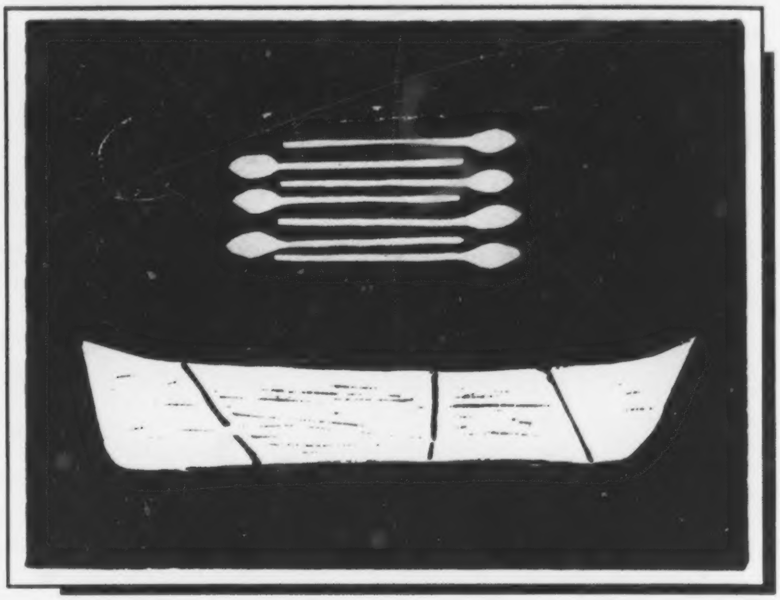
The second project of this teaching unit on the Pacific Region will be disbursed throughout the school year. In this project, students will learn about various aspects of life in Chinese families and communities. In addition, the students will produce materials to exchange with our sister school in China.

The project will draw upon various community resources to expand the classroom curriculum to include information on China. The following resources could be utilized in classroom activities designed to foster in the students a greater understanding and appreciation of the Chinese culture:

1. Guest speakers from China (if available);
2. Chinese high school students who attend a bilingual program at a local school (if available);
3. China kit developed by the DOE in connection with the sister school program;
4. Films, kits, and books relating to China and the Pacific Region.

Throughout the school year, students would participate in a variety of special activities that will be centered around Chinese customs, traditions, holidays, and institutions. For example, after touring a local China restaurant, the students could cook a Chinese meal, using spices that have been imported from China. The third graders could also read Chinese children's stories or play Chinese children's games. These materials could be made available to the students at classroom centers that focus on various aspects of the social and cultural life of China. In addition, in urban schools classroom space could be set aside for the Chinese bilingual teacher to work with individual students. At times, the bilingual teacher could also teach the entire class to familiarize the students with his or her presence in the classroom. At other occasions, the bilingual teacher and the regular classroom teacher could team teach the whole class.

A second component of this project would consist of producing various items to be sent to our sister school in China. To develop the students' pride in their own work, a box could be set up and labeled, "Our Best Work." As the school year progresses, students could fill the container with samples of their assignments and projects. These items could be sent to our sister school in Harbin in exchange for materials from our Chinese friends for the third graders to explore and display in their classroom.



Project Three: Applying Computer Skills

The third project of the learning unit on the Pacific Region will focus on the computer as a communication tool and as a medium for learning. Students will apply their word processing skills when writing narratives to be sent to China and Australia. In addition, the students will learn to master graphics software to produce a newsletter that will be distributed throughout the school and to the foreign pen pals.

The students will use word processors to send letters to their Australian pen pals via the telecommunications network. After the students have developed relationships with their pen pals, they will start to exchange information about specific topics, such as my family, my town, things I like to eat, slang words, and hobbies and games.

Through these activities, the students will improve their reading and writing skills. In addition, they will learn how to write and respond to personal letters and how to write clearly and precisely about a specific topic.

Evaluating Curriculum Materials and Student Progress

How successful will this teaching unit actually be in blending information on the Pacific Region with existing curriculum content and in promoting in the students an interest in these areas of the world? How will the students' progress be evaluated? These questions must be addressed before the innovative techniques can be incorporated into instruction.

The Sister School Exchange Program and the Australaska Writing Project focus on the direct exchange of current information on cultural habits, values and beliefs between students in Alaska and students in China and Australia. This exchange will contribute to decreasing egocentric, ethnocentric, and stereotypical perceptions of the students.

Initially, the students will focus on themselves as they produce the video documentary. They will become more aware of other nations as they write to their pen pals in Australia and exchange materials with our sister school in China. Class discussions comparing and contrasting the lives of people in Alaska, China and Australia will increasingly enable the students to empathize with others and to assume a positive attitude toward cultural diversity around the world. The third graders will be encouraged to draw upon their experiences with their pen pals to evaluate trends of change around the world. The students will observe change as they compare the information they obtain from encyclopedias, textbooks, films, etc. with the information they acquire through their interactions with their peers in China and Australia. The students will have to deal with ambiguous situations while producing the video documentary. Prior to and during the filming of the documentary, the third graders will discuss various ways of viewing ideas. These discussions will enable the students to react more constructively to situations of conflict and ambiguity.

The students' progress will be evaluated through examinations of work samples and in conference between individual students and the teacher. These conferences will focus on determining how the interactions with students in China and Australia affect each child. Special attention will be given to the level of a student's enthusiasm about and to the degree of his or her involvement in the project. In addition, the conferences will address the students' progress in improving their writing skills.

Resources

For additional resources and information regarding the Sister School Exchange Program, contact Annie Calkins at the Alaska Department of Education or Bill Parrett the the UAF Department of Education.

RESOURCES FOR EXPLORING JAPAN'S CULTURAL HERITAGE

by
Raymond Stein
Sitka

What follows is a teaching unit in which I will use Akira Kurosawa's most recent movie, "Ran", to explore Japan's samurai heritage with my high-school students. This unit is part of a more encompassing study of Japan and will provide the students with background information for exploring samurai influence on modern Japanese culture, business, and society.

I believe that in order to understand Japan's successes after World War II, one needs to know about the country's feudal past. "Ran" is set in Tokugawa, Japan at the height of the development of the samurai code of honor, "Bushido." As such, the movie provides an excellent foundation from which to build student understanding of Japan's military past.

I believe that the teaching unit will be well received by the students because of their natural interest in movies. The fact that "Ran" presents a considerable amount of action will most likely contribute to increasing the students' interest. I will show the movie over a period of about 2 weeks, at a rate of about 20-25 minutes per day. The teaching unit will thus be presented as a mini-series, and I hope that this organization will increase the students' interest in the unit enough to encourage them to discuss the materials during after-school hours.

There are several other reasons why I believe in the positive outcomes of this teaching experiment. I think that the unfamiliar concepts presented in the film offer a variety of topics for student discussions and other activities. I will prepare additional video clips, mini-lectures, and hands-on projects to address student questions and to provide further background information. In addition, I will pursue the possibility of coordinating this teaching unit with the English curriculum by comparing the movie with the works of other dramatists. I also believe that, if properly prepared, the students will enjoy and benefit from being exposed to a foreign film with English subtitles.

To summarize the objectives of this teaching unit, I want to point out that all teaching/learning activities will seek to provide the students with a firm understanding of feudalism in historical Japan. The film, discussions, group activities, student projects, and homework assignments will address various aspects of bushido in order to enable the students to interpret the wonder of Japan's modernization in a subsequent unit. What follows is a series of lesson plans for implementing this teaching unit.

Lesson 1

Lesson: I will begin this unit by discussing with my students various questions, perhaps stereotypes, about the samurai and their code of honor. Questions to be addressed will include the following: Why do many Japanese companies treat their employees paternalistically, and why, as a result, do many workers stay with the same employer for a lifetime? how was Japan able to rebound so quickly from its utter defeat in World War II to become the second biggest economic power in the world? Why were hundreds of young Japanese men willing to commit suicide as kamikaze pilots in World War II?

After this class discussion I will suggest that some of these questions may be partially answered by our understanding of the samurai code of honor. Then I will announce to the class that for the following two weeks, we will be viewing and discussing a movie to try to understand Japan's feudal past and its continuing influence on the present.

Following this introduction, I will present a 25-minute video tape, "Nobles and Samurai" from the series "Video Letters from Japan." While watching the film, the students will jot down five questions about the presented material. In a brief lecture, I will then expand on important aspects of the film. The students' questions will be collected and graded satisfactory or unsatisfactory.

Homework: Study for a quiz on the lecture material.

Lesson 2

Evaluation: Check on the students' knowledge of the material from the previous lesson.

Lesson: Show "Ran" for 20-25 minutes. Discuss the story and identify the characters so far.

Homework: Prepare for retelling the story.

Lesson 3

Evaluation: Retell the first part of the story.

Lesson: Show the next 20-25 minutes of "Ran." Because the story line is complex, I will spend the rest of the period recapping the story and delineating the characters.

Homework: Prepare for retelling the story. It is important that the students familiarize themselves with the Japanese names so that the movie will make sense to them as it goes on. Moreover, by testing comprehension, I will encourage the students to discuss the movie with each other at night. This will contribute to developing the "mini-series" interest which I mentioned earlier.

Lesson 4

Evaluation:	Comprehension check: Write a summary of the story. After collecting the students' papers, I will present my own model of a plot summary, both to let the students know what I am expecting and to ensure that everyone has a clear understanding of the story. I would like to add at this point that generally, I will spend a few minutes at the beginning of each class period explaining student assignments. I also want to point out that I keep emphasizing the students' comprehension of the plot not so much because the story line is rather complex, but more because my class includes students of wide-ranging ability levels. In a unit of this length, I want to do my best to make sure that every student understands the materials from the onset.
Lesson:	Show "Ran," recap the story. Discuss tensions, conflicts and motives as they are developing within specific characters.
Homework:	I will ask the students to remember either fictive accounts of real-live situations in which they encountered feelings of jealousy, competition, hate or loyalty.

Lesson 5

Evaluation:	Write a paragraph relating one of the emotions, motives, or situations you viewed in the film to something you

have experienced, either in fiction (e.g. another movie, a book, etc.) or in real life.

Lesson: Show 20 minutes of "Ran." Ensure that the students are following the story by asking several students to retell today's episode. Concentrate discussion on Hidetora, the main character, emphasizing his personal characteristics, intentions, weaknesses, and relationships with his sons.

Homework: Prepare for a character analysis of Hidetora in paragraph form.

Lesson 6

Evaluation: Write a paragraph or two examining the character of Hidetora. Write about several aspects of his personality. Subdivide these characteristics if possible.

Lesson: Continue showing the movie. Review the entire story up to this point. Discuss field questions on the plot or on any other area in which the students ask for clarification. Doubtless, every day, the students will bring up questions about topics that are not directly related to the film. I will be prepared to address such questions by providing video clips, handouts, slides, etc. on such areas as the martial arts, history of Japan, Tokugawa culture.

Homework: Prepare for evaluation by reviewing and rediscussing the story.

Lesson 7

Evaluation: Write your own ending to the movie. What do you think will happen?

Lesson: Analyze the characters of the three sons. For this activity, I will use a small group organization called "jigsaw strategy." The students will first team up in "home groups" of three to decide who is to report on which son. Then the students will meet in "expert groups" which include students who are analyzing the same character. After the expert groups have completed their work, the students will return to their home groups to present their reports. Before these group activities, I will explain to the students that their next evaluation will be based on the topics to be addressed in the group activities. I hope that this announcement, together with the effects of peer pressure, will motivate the students to work well.

Homework: Study today's notes about the three sons.

Lesson 8

Evaluation: Answer the following questions: Which of the three brothers has the lowest morals and ethics? Why? Your books may be open.

Lesson: Show the last episode of "Ran" up to the last 15 minutes of the movie. Discuss the plot and field questions.

Homework: There will be another evaluation tomorrow. Therefore, reviewing notes on the story may be helpful.

Lesson 9

Evaluation: In "Ran" we see the samurai class in feudal Japan. This samurai class lived by strict rules which were part of an equally strict code. From witnessing the behavior, expressions, and feelings of the characters in the film and by assuming that these actions are representative of real samurai, make a list of samurai characteristics and rules.

Lesson: Show the end of the movie. Allow time for free discussion afterwards. Discuss ending. Prepare students for discussion with a resource person the next day.

Homework: Prepare one or two questions to ask the resource person from Japan who will be coming tomorrow (if available). Start to study for the unit test which will be given the day after tomorrow.

Lesson 10

Evaluation: Check questions students have prepared.

Lesson: Introduce resource person, if one is available. The students will ask him their questions which will hopefully elicit his perceptions of the samurai code of honor. If time remains at the end of the period, review some of the unit material in preparation for the unit test.

Homework: Study for the unit test on "Ran," samurai, and bushido.

Lesson 11

Unit Test: The test will include questions covering all levels of analysis.

Conclusion

I am looking forward to trying out this material and I am sure that the variety of activities and exercises included in this unit will keep the students interested throughout the eleven day sequence. I feel that my students will learn a great deal about Japan through this teaching unit.

Additional activities will contribute to broadening this learning experience by allowing the students to express their understanding of bushido with reference to their own culture(s).

A question I would like to address with this concluding paragraph is, why should we teach Japanese culture to Native students who are already confronted with the difficult task of having to learn the culture of the dominant society while trying to maintain their own cultural heritage? I do not wish to belittle this question, but I believe that it is very important for Native Alaskan students to understand Japanese culture, since many of these students will be negotiating with Asians over their natural resources. Cultural ecleticism is absolutely mandatory for the future economic well-being of the Native people of Alaska and for the survival, maintenance, and development of their culture in an economically secure environment. Therefore, I support wholeheartedly studies of the Pacific Rim, but on the other hand, I do not ever want my students to lose touch with their own cultural heritage.

ALASKANS EXPERIENCE JAPANESE CULTURE THROUGH MUSIC

by
Rosemary Branham
Kenai

"I Hear America Singing"

I hear America singing, the varied carols I hear.
Those of mechanics, each one singing his as it should be blithe and strong.
The carpenter singing his as he measures his plank or beam,
The mason singing his as he makes ready for work, or leaves off work,
The boatman singing what belongs to him on his boat, the deckhand singing
on the steamboat deck,
The shoemaker singing as he sits on his bench, the hatter singing as he stands,
The wood-cutter's song, the ploughboy's on his way in the morning, or at
noon intermissions or at sundown,
The delicious singing of the mother, or of the young wife at work, or of the
girl sewing or washing,
Each singing what belongs to him or her and to none else,
The day what belongs to the day—at night the party of young fellows, robust,
friendly, Singing with open mouths their strong melodious songs.

from Walt Whitman's "*Leaves of Grass*"

Walt Whitman's well-known poem establishes a rationale for my unit on Japanese music. Whitman proclaims that all men and women sing their own songs, but I don't think that the poet's words should be interpreted to mean that these are only "Americans" singing. There are Japanese farmers, fishermen, carpenters and other laboring people who are also singing. How could we better increase our understanding and appreciation of the Japanese culture as well as our own Alaskan culture than through music?

My ideas for this unit "Alaskans Experience Japanese Culture Through Music" have been informed by a workshop during the Rural Alaska Instructional Improvement Academy entitled "Education in Japan—Lessons and Connections for Alaska", and by a personal interest in Japan which I developed after communicating with my school's sister school in Toyoura, Hokkaido, during the 1986-87 school year.

While teaching students the unique language and system of symbols that form music theory, we also explore ethnic music from around the world. In this paper, I will describe a unit on

Japanese music that incorporates singing, playing instruments, dancing, and performing musical drama and puppetry. While fitting into the music curriculum, the unit also integrates easily into such academic disciplines as language arts, art, geography, social studies, and science.

This unit helps bridge the cultural gap between the U.S. and Japan, thus eliminating myths and fallacies in the countries' perception of each other. In accordance with the recent awareness of economic, political, and military interdependences between the Pacific Basin countries, which include the U.S. and Japan, this music unit is intended to help promote the Association of Southeast Asian Nations (ASEAN) suggestion that "the Pacific Ocean is a zone of peace, freedom and neutrality." I would like the unit to familiarize our students with the Japanese culture and help them to make international friends.

On the following pages, I will describe which content I will include in the music unit, what methods of instruction I will use, and how I will determine what was learned. Resource suggestions are also included.

My unit, "Alaskans Experience Japanese Culture Through Music" fits into the K-6 elementary music curriculum. The curriculum guide for elementary music by the Kenai Peninsula Borough School District states, "one purpose of education is to challenge a person's mental, physical, and emotional capacities to grow." Through this unit, students will be exposed to many facets of Japanese culture that will challenge them to learn a foreign language, communicate with Japanese students, and in general, gain insight into a people and culture different from their own.

I use the term "culture" as a general term for such areas as customs, education or the arts, the latter of which can be segmented into religion, fine arts, and music. It is difficult to generalize when talking about Japanese culture because it is a product of the cultural heritage of the Orient, as indicated by Tazawa, et al. (1985) in the following description of the development of Japanese culture:

> "The distinctive Japanese culture we have today is the result of encounters between traditional Japanese cultures and foreign cultures through which the latter were imported, absorbed and harmoniously blended. Rather than rejecting alien cultures, the Japanese have chosen to fit them into their own aesthetic framework, often quite creatively adapting them to Japanese needs."

In order to understand contemporary Japan and its culture, one must study the process by which the ancestors of today's Japanese "Japanized" foreign cultures. The musical development of Japan owes much to the music of China and Korea. Within this cultural frame, Japanese music is, nevertheless, unique.

In the history of Japanese music, vocal music generally played a more important role than instrumental music. Some traditional music developed as part of such drama genres as Noh and Kyogen, Kabuki, and Bunraku. Noh, with 600 years of history, is Japan's classic theater art of extreme refinement and symbolism. The Kyogen is a theater genre of mainly mime farce, and is often inserted as an intermission piece between two Noh plays. Kabuki, another of Japan's theatrical arts, was cultivated primarily by the merchants. It's inception goes back to the latter part of the 16th century. The Japanese puppet show, known as Banraku, is a precious folkloristic cultural heritage in which the Japanese take great pride. Most folk songs, called "min-yo", were originally associated with religious events or daily labor, such as fishing, farming, and packhorse driving. However, now as lifestyles have changed, folk songs are often sung for recreation.

Gagaku, or "elegant music" refers to classical dance, song, and instrumental music as they were performed in a court among the powerful nobility and upper classes. Today there are three types of Gagaku: ancient dances and music of pure Japanese origin, compositions imported from various parts of Asia, and Japanese creations composed after foreign styles. These adaptations of foreign patterns are recognized as a truly classical art form after they have been modified to suit the tastes of the Japanese people.

Do-yo are Japanese children's songs. They are distinguished from folk songs and divided into traditional and modern. They include lullabies, or komori-uta and festival songs, gosekku. Traditional songs include themes like rope-skipping, kite flying and playing hide-and-seek. Today's poets and composers are creating songs that express children's feelings more directly.

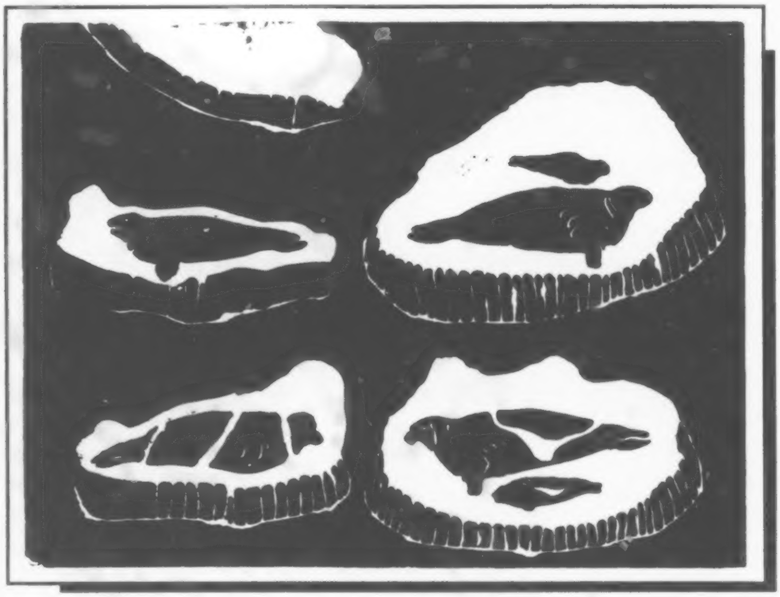
My unit presents two types of traditional Japanese music: art music and folk music. Art music has several different styles that have been maintained and modified over time. In addition to exposing students to various forms of Japanese music, the unit also includes lessons about Japanese instruments, or sankyoku. The primitive recorder was modified to become the shakuhachi, a bamboo flute. The zither bacame the koto, having 13 strings. The shamisen is a three-stringed balalaika-type guitar, played with a large plectrum. Additional traditional instruments include the fue, a smaller flute; the biwa, a lyre with four strings; and tsuzumi and taiko, small and large hand drums. Japanese music is also accompanied with hand-clapping, beating sticks on barrels and bells. This unit on Japanese music also includes language arts lessons on examples of Japanese poetry, Haiku, which students will read and write. The students will have the opportunity to compose music in the style of the Orient to go with their Haiku. A Japanese fairy tale will be dramatized and videotaped using appropriate instrumental accompaniment.

In another lesson the students will correspond with their sister school. They will write about their music class in Alaska and ask Japanese students questions about their music classes in Japan. Students might also share information about their musical interests outside of school, for example, their favorite pop tunes, favorite performers or groups, etc. In an art lesson the students will view and discuss examples of paintings and prints by Japanese artists as they relate in theme to musical compositions.

Students will learn about world renowned Japanese conductor Seiji Ozawa and violinist Shinichi Suzuki. As this subject matter will integrate into a social studies lesson, so will discussions of other past and present occupations of Japanese people. Furthermore, the unit will also include material from the curricula for geography and science. For example, students will be reading maps and discussing particular plant and animal species native to Japan.

In their article, "Weaving Curriculum Webs," Corwin, Hein, and Levin (see this publication) describe an informal or "open education" approach to study. This unit represents such an approach, because it can be implemented at any time during the year in no "predetermined order." However, I would like to introduce the unit during the first quarter of the school year to stimulate school-wide interest in our sister school. The unit doesn't necessarily have to be presented in its entirety. Exploring Japanese music can take place over a period of weeks or months, as the "open education" approach suggests.

Like Corwin, et al., I believe that "individual children learn in a variety of ways, with different children learning different things from the same experience." My unit supports individual learning styles through individual as well as small- and whole-group activities. Small- and whole-group activities include performing songs accompanied by instrument ensembles, dancing folk dances, performing singing games and puppet shows, and producing a video from a Japanese fairy tale. Lessons for individuals involve writing Haiku poetry and composing the music for it, writing letters (using the computer word processor), and making puppets for a show.



Lessons will incorporate many types of media ranging from print to video tapes. Guest musicians will be invited to present material in their specialty area. Lessons are planned to include all learning modes.

I believe that through this unit, the students will "learn through interaction with the world," the international language of music as the medium of interaction. Students will contact students in Japan via the mail.

In their curriculum, "The Axe Handle Academy," Scollon and Scollon (see this publication) ask parents and teachers "What is an appropriate education for our children? How can we prepare them for a world that is unknown to all of us?" In response to these questions, the Scollons propose a curriculum that includes the following three components: bioregional, cultural, and communication studies. My unit of study can be integrated into each of these three components.

Within the bioregional component, students will compare and contrast language, school and community activities, and communicate about Native Alaskan music, and national anthems. Within the cultural component students will identify, compare, and contrast Alaskan, American, and Japanese musical styles and selections of historic and modern music.

I agree with the Scollons that "communication is at the heart of nearly all our activities." The young musicians involved with this unit will develop their communication skills through class discussions, writing and video projects, and telecommunications. Students will have many opportunities to use their communication skills by listening, observing, and reflecting.

This music unit will "increase cultural contact" and give students the opportunity to think "comparatively about culture," as suggested in the "Axe Handle Academy." Students in Alaska and in Japan will compare music lessons, songs, instruments, dances and performing groups. They will also compare music associated with holidays and share musical interests. The unit will allow students to "bridge the Pacific" and reduce the size of our planet through mutual study of cultures. The Scollons suggest, "the best teachers carry on their learning in the company and dialogue with their students." As Confucius practiced this, so will the those who implement this unit.

While researching the materials for this unit, I have become increasingly motivated motivating my students toward more active learning. It is my goal to try and merge our efforts as a "collaborative learning team" traveling to Japan together. What an achievement it would be if we were touring Japan with a group of young musicians, giving concerts, meeting the Japanese, and seeing the sights of their country! Such a trip would lend itself to future cultural exchanges between our community and the community of our sister school. Promoting and implementing such an exchange program will certainly provide goals for students to strive for. Community support and involvement would be essential to achieving our goal. Undeniably, the entire school would become involved in the exchange program since our students traveling to Japan would represent our school as well as our state and country.

I hope my excitement about implementing this unit is contagious. I am ready! I would like to motivate my colleagues to pursue a unit on Japan in their classrooms. The possibilities for school-wide units integrating Japanese culture are unlimited. Hopefully, our schools will exchange instruments native to our cultures, especially a koto or shamisen.

I anticipate celebrating a few of the Japanese national holidays throughout the school year. For example, Children's Day, May 5th; or Culture Day, November 3rd; or the holiday commemorating the founding of the nation on February 11th. "Japan Week" would be another program which perhaps our sister school could reciprocate with by establishing "Alaska Week". Projects such as these would need to be coordinated by a committee of volunteer parents and staff members.

There are various other possibilities for involving the community in our exploration of Japanese culture. Should a Japanese delegation visit our community, it would seem appropriate to house our guests with host families. Perhaps a special community event, such as a picnic could be organized. In case a delegation of students or community members would want to travel to Japan, fund-raising would become a major project, involving the entire school and the community.

I have planned this unit with a project-centered approach because the varied learning tasks included in a project can be easily integrated with the academic, subject-oriented learning in school and with the experience-based, process-oriented learning in the community. Therefore, I believe that this music project will meet the needs of the students and community.

Local music educators of the Kenai Peninsula Borough School District have established the following goals for preparing students to participate in and contribute to informed musical expressions: The student will (1) have experienced a sense of accomplishment and enjoyment; (2) be able to sing and/or use musical instruments to satisfy personal needs and standards; (3) internalize the emotional importance of music, becoming aware of his own unique imagination, emotion and energy; (4) be able to make value judgments about all types of music performed or listened to, in terms of appropriate standards; (5) have the ability to create, comprehend and respond to a variety of musical expressions (Kenai Peninsula Borough School District, 1984, p. iii).. These goals have informed the development of this music unit. The specific objectives of the unit have been devised from learning theory and the general goal of developing in the students the skills that will help them to better understand the aesthetics of music.

To determine what the students have learned I will use informal evaluations through observations, inventories, teacher-made tests, and general subjective evaluations . Collecting, organizing, analyzing, and reporting these data will be the essence of these evaluations.

A detailed list of print, audio and map references for this unit follows in Appendix A. In addition, you may want to inquire locally about Japanese/American citizens who could be guest presentors in your class; or perhaps a church or family has visitors from the Orient who would visit your classroom. The Consulate General of Japan, 909 W. 9th Avenue, Suite 301, Anchorage, Alaska 99501, (907) 279-8428, is a marvelous source for a variety of publications and educational services, including films. The Korean Consulate General, 101 Benson Blvd., Suite 304, Anchorage, AK 99503, (907) 561-5488, and the Embassy of China, 2300 Conneticut Avenue Northwest, Washington, D.C. 20008, (202) 328-2520, are other resources.

Annie Calkins from the Alaska Department of Education, P.O. Box F, Juneau, Alaska 99811-0500, (907) 465-2841 is the coordinator of the sister school program. Dr. William Parrett, Chair, Dept. of Education, Univ. of Alaska Fairbanks, Fairbanks, AK, 99775, (907) 474-6187 is also involved with sister schools. An excellent resource person on the Pacific Rim countries is Douglas Phillips, Social Studies Program Coordinator for the Anchorage School District, 4600 DeBarr Avenue, P.O. Box 196614, Anchorage, Alaska 99519-6614.

As our school nurtures the relationship with its sister school through the music curriculum, it is my wish that other Alaskans will become involved in the "Network" and implement cultural and "people-to-people" exchanges with our Pacific Rim neighbors.

Ahhh, I will soon hear Alaskans singing!!

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Section III

SOME ALTERNATIVE PERSPECTIVES

The articles included in this section served as background reading, and, along with the rural academy workshops and the cumulative experience of the teachers themselves, provided the stimulus for the teachers' essays included in the previous sections. The articles provide a range of alternative perspectives on how schools and teachers might approach the task of creating an educational environment suited to the conditions in rural Alaskan communities. With the exception of the last article (Corwin, et .al.), these articles were written with an Alaskan context in mind.

THE AXE HANDLE ACADEMY: A PROPOSAL FOR A BIOREGIONAL, THEMATIC HUMANITIES EDUCATION

by
Ron Scollon
Suzanne Scollon
The Gutenberg Dump, Limited
Haines

This article was originally written under contract to the Sealaska Heritage Foundation, Juneau, Alaska, 1986.

When one of our parents entered kindergarten a good education was thought to be knowing the classics, the ability to read and write at least one classical language, the ability to write clear prose, the ability to give a good, clear and persuasive public speech, and conscientious citizenship. The technology in the home and the school was very little different from the technology in the homes and schools of Socrates, Pythagoras and Confucius.

By the time the oldest of us entered kindergarten the world had gone through one world war and was entering the second. His home and school had hot and cold water, electricity, central heating, radios, and movies. While he was in elementary school he saw his first jet plane overhead. In junior high school he first saw television. The year he graduated from high school Sputnik I first orbited the earth.

In school he had read parts of some classics, he had dropped Latin and gotten away with it, he was still expected to write clear prose, but there was no public speaking taught, and good citizenship had been transformed by World War II into patriotism first and then by the Korean War into a deep fear of others.

By the time our son began kindergarten micro-computers were part of daily life, the majority of children in our country were spending more time watching television than attending school, the classics and classical languages were no longer a part of schooling, children were expected to be able to fill in blanks in worksheets and multiple choice tests, and multinational corporations had become more significant political and economic entities than all but a few nations of the earth.

It is safe to say that no one can predict what kind of world our son will graduate into from high school. In these three generations the world has experienced greater and more widespread shocks of change than at any time in the past. The cultural and technological gulf between our parents and our son is greater than the gulf of thousands of years between Socrates or Confucius and our parents.

As we see this gulf widening each day we parents and teachers ask ourselves: What is an appropriate education for our children? How can we prepare them for a world that is unknown to all of us?

In the four decades since World War II we have tried to compensate for the pace of change by making many incremental adjustments in our curriculum. We have continued to add items to the curriculum in order to keep up with the times. But, of course, with each item added something had to be dropped because our days and hours are limited. Education in America has become a collage of confetti. It is a confusing aggregate of so many separate pieces that it does not add up to a coherent picture.

The Axe Handle Academy is a proposal for a kind of education that we think would make sense in this world, not the world of the 50's and 60's, a kind of education that we could bring about in Alaska over a period of a few years because it builds on ideas and practices that some teachers and schools are already using now, a kind of education that would genuinely give our children a sense of confidence and ability in facing the unknown world they will meet upon graduation.

How Well Do you Know Your Place?

We'd like to start with an example. Here is a final exam that students would be asked to take and pass:

1. Define the limits of your bioregion. Be able to justify the boundaries you choose.
2. Trace the water you drink from precipitation to tap and from tap to ultimate disposal.
3. How many days until the moon is full (plus or minus a couple of days)?
4. Describe the soil around your home.
5. What are the primary subsistence techniques of the culture(s)that live in your area?
6. Name five native edible plants in your bioregion and their season(s) of availability.
7. From what direction do winter storms generally come in your region?
8. Where does your garbage go?
9. How long is the growing season where you live?
10. Name five trees in your area. Which of them are native?
11. Name five resident and any migratory birds in your area.
12. What is the land use history by humans in your bioregion during the past century?
13. What primary geological events/processes influenced the land forms where you live?
14. What species have become extinct in your area?
15. What are the major plant associations in your region?
16. From where you are reading this, point north.

17. What spring wildflower is consistently among the first to bloom where you live?
18. What kinds of rocks and minerals are found in your bioregion?
19. Were the stars out last night?
20. Name some other beings (nonhuman) which share your bioregion.
21. How many people live next door to you? What are their names?
22. How much gasoline and other fossil fuels do you use a week, on the average?
23. What kind of energy costs you the most money? What kind of energy is it? What portion of your use of energy does it account for?
24. What plans are there for development of energy or mineral resources in your bioregion?
25. What people are indigenous to your region?
26. Distinguish between inhabitory and transient populations of people in your region.
27. What languages are spoken in your region? Which are indigenous and which are immigrant languages?
28. Name seven prominent land forms in your region. Whose language is used for those names?
29. Identify the political/governmental boundaries that divide your bioregion.
30. Evaluate the effects of these divisions on the life of your region.
31. Identify one other bioregion and compare and contrast it with your own.
32. Give five aspects of your life that are independent of your bioregion. Are any of them supported by the earth elsewhere?

To do well on a test like this a student will have to integrate knowledge from many fields such as biology, meteorology, earth science, and geography. But the student will also need to integrate that scientific knowledge with history, anthropology, language arts, Indian studies, and social studies. But even that is not enough. The student will have to apply that knowledge to his own day-to-day life. He or she will have to think about such things as plumbing, the city water and sewer system, the daily weather, and resource use in his or her own home, school and community.

In our present curriculum a student can possibly become well versed in each of these separate subject areas but would still not be able to answer most of the questions on this test. Of course this is only an example of what we mean by a bioregional perspective in the Axe Handle Academy. We propose that virtually all of the studies in the sciences, mathematics, and social studies will be organized around bioregional questions without losing any of the essential knowledge we now require of our students.

What we would gain by a bioregional approach would be students who have learned to think about the consequences of their actions on the earth, its resources and its other living inhabitants. This bioregional component of the curriculum of the Axe Handle Academy we would call *Bioregional Studies*.

How Well Do You Know Your Culture?

Another component of the curriculum of the Axe Handle Academy we will call *Cultural Studies*. Here is an example of a final exam that students would be asked to take and pass:

1. Define the boundaries of your culture. Be able to justify the boundaries you choose. How do you identify a member, by language, by place of residence, by appearance, by food, by other means?
2. In what bioregion did your culture originate and does it reside there now?
3. What are the primary sources from which you can learn your culture?
4. What languages do you need to know to study the significant teachings of your culture?
5. What people do you need to know to study the significant teachings of your culture?
6. Define a myth and give one example from each of three cultures, including your own as one culture.
7. Define the difference between a classic book and a sacred book.
8. Discuss the difference between pride in your own culture and arrogance.
9. Discuss the ways in which different cultural traditions deal with pride and arrogance.
10. How has the language used by members of your culture been affected by laws, religion, education, and social identity?
11. How does your culture deal with outsiders, misfits, handicapped, or exiles?
12. Does your culture use isolation or alienation as a punishment, and if so, for what offenses?
13. Name three works in your literature that deal with self-concept and alienation.
14. Is it possible to be an independent thinker without being alienated? Give several examples from world literature to support your position.
15. Is alienation a good or a bad condition? Give at least three works from world literature to support your position.
16. How is pride displayed in your culture? Show how that is different from at least one other culture.
17. How does education contribute to alienation?
18. What is the effect of alienation on the children of alienated individuals?
19. What reasons do you have to be proud of your culture? Of your country? Of your family? What other groups are you proud to be a part of?
20. To whom or what do you owe your main duty?

21. Give three places you might encounter conflict in your loyalties and discuss how you might resolve those conflicts?
22. How has the history of our country been influenced by the ideas of philosophers? Give two or three examples.
23. Which aspects of the Constitution of the United States of America would Confucius or Mencius have agreed with and which aspects would they have disagreed with?
24. Draw up a hierarchy of your loyalties from among such categories as friends, parents, siblings, extended family members, local governments, state government, federal government, your culture, yor clan, the people of the earth, an ideal, or any other categories you wish. Justify your hierarchy by reference to your culture and show how your hierarchy differs from at least one other culture.
25. Which is the most durable medium for the preservation of culture, the spoken word, print, or electronic storage (tape or computer)? Justify your choice.

To do well on this test a student will have to integrate knowledge from many areas of the humanities. He or she will also have had to study significant selections from the classics of his or her own culture as well as other cultures. The student will also need to study anthropology to be able to think comparatively about culture. More than that, however, the student will have to have thought deeply about his or her own place in the cultural world.

Again, this is just an example of what we mean by the thematic, humanities approach of the Axe Handle Academy. By organizing around significant themes such as *Alienation and Self-Concept, Pride and Arrogance*, or *Conflict of Loyalty* students will learn significant portions of world literature, history, and philosophy without losing any of the essential knowledge we are now requiring.

What we would gain would be students who have learned to think about their own culture. They will have come to think about their own identity as members of their own culture and also to think about ways in which their culture differs from other contemporary cultures and the cultures of the past. We can think of no better preparation for a world in which steadily increasing cultural contact is becoming the norm than this component which would be called *Cultural Studies*.

How Well Do You Communicate?

The third component of the curriculum of the Axe Handle Academy we would call *Communication Studies*. Here again is a sample exam which could be given:

1. Give three factors that you can control which will slow down your response time while speeding up the response time of those you talk with.
2. Describe the pathway of an electronic mail message from sender to receiver. Name the major agencies involved.
3. How many minutes of the evening news broadcast on television are devoted to news, how many to advertising and other activities?
4. Name three films which have pioneered significant new film technologies.

5. Write a short letter in three formats: 1) as a letter to the editor of your local newspaper, 2) as a letter to your Congressman in Washington, 3) as a letter to a personal friend.
6. Describe the differences between chain and network communication and hub and wheel communication. Indicate the main advantages and disadvantages of each.
7. You are planning an event in your community. How would you publicize it? Which media are most effective in terms of getting the desired results for the time and money spent?
8. What percent of the words you hear or read in a day are generated within your community?
9. What percent of the words you speak or write in a week are generated within your community?
10. What percent of the words you speak, write, hear, or read are in a language other than English?
11. If you have something you want your grandchildren to know and pass on to their grandchildren, how would you communicate it to them?
12. Describe the path of a news story from its origin to your home.
13. Describe the path of a story you originate to its publication in a magazine.
14. You need to find out about something from an elder. What pattern would you use to facilitate communication?
15. Identify five stages of the writing process.
16. Trace the pathway of a book from research to reading. Identify the major institutions or agencies involved along the way.
17. Describe the configuration of expectations and behaviors that will allow you to present yourself best in a job interview.
18. Give three strategies you can use to slow down someone who is speaking to you without generating a sense of hostility in the process.
19. You are organizing a meeting of parents, teachers, and students. Discuss five factors that you would alter to make it easier for all to listen to the point of view of the students. Now do the same thing to make it easier for all to listen to the point of view of the teacher. Do the same for parents.

As in *Bioregional Studies* and *Cultural Studies*, in *Communication Studies* a student would need to command a much wider range of knowledge and skills to do well at this test. Not only would he or she need to be an effective writer who could direct his or her style to a particular audience, the student would need to be adept at determining the audience, the appropriate medium for approaching that audience, and ways to evaluate the effects of his or her communication. The student would be required to develop a critical understanding of not only literacy but spoken and electronic communications as well.

We believe that though in *Communication Studies* the student would not lose any of the skills now required of students, he or she would gain considerably in the ability to relate these skills to significant communication requirements in his or her life.

The Curriculum of the Axe Handle Academy

The substance of any educational program is its curriculum. The substance of the Axe Handle Academy has these three components: *Bioregional Studies*, *Cultural Studies*, and *Communication Studies*. The present hodgepodge of subjects, disciplines, and skills would be integrated into these three components.

The present practice of tracking students into academic or vocational programs is not recognized by the Axe Handle Academy. We believe that it is equally important for the professional academic researcher and the manager of the local hardware store to understand the effects of his or her work on the bioregions of the earth. To be informed citizens each must be able to understand and evaluate the impact resource and other development decisions will have on the earth in his or her bioregion. They must be able to weigh those impacts against social and economic impacts. In other words, whatever our work in life may be we all must have a home to which we are committed and we need to know how to think about human activities and decisions in terms of their impacts on our homes.

In the same way, whether one's career in life is as a widely traveled account executive or as a worker in a local sawmill, each of us is a member of a culture. Nowadays many of us are on the boundaries between cultures. A solid sense of identity is essential for a healthy adult life as well as for productive contribution to the society. The study of culture cannot be restricted to a privileged group of academic track students.

Again, whatever one's place in life, communication is at the heart of nearly all of our activities. Whether one is a negotiator in international business or a commercial fisherman, his or her goals will only be achieved with others through effective communication skills. In addition, our society is founded on the informed, educated decisions of our voting citizens. We all must be able to read, listen, and view the positions of others and to evaluate the information we are receiving from a constant barrage of print, spoken, and electronic media.

The curriculum is the substance of the Axe Handle Academy. It would give each student a firm understanding in *Bioregional Studies*, *Cultural Studies*, and *Communication Studies*.

The Teacher Is the Focus of the Axe Handle Academy

Teachers in American education are normally called professionals but are rarely treated as if they were professionals. One of the most important qualities of a true professional education is not an accumulation of knowledge, it is an education in learning to learn. Doctors, lawyers, and other professionals are expected to deal with extremely diverse kinds of problems covering many fields of knowledge and life. They are expected to work through the complexity, learn whatever needs to be learned, and then to exercise their judgment in arriving at a decision which can be the basis for action. A person who does not deal constantly with new learning is a technician, not a professional.

Yet many people expect teachers to be more like technicians. They are expected to know everything required of them when they graduate as certified teachers. They are expected to remain within their certified body of knowledge throughout their careers. In our current system teachers are expected to take further course work to "upgrade" their education, as technicians would be expected to return to school before being allowed to work in a new area.

The curriculum of the Axe Handle Academy is as varied, complex, and problematic as anything to be found by any professional. There are no courses at present that a teacher could take in a bioregional perspective. There is no course or even degree program that would prepare a teacher to teach in our cultural studies program. Our communication studies component would try the intelligence, knowledge, and learning ability of many communications specialists.

Theodore Roethke, the poet, once said "A teacher is one who carries on his education in public." The curriculum of the Axe Handle Academy is a curriculum for both students and teachers. Our teachers are expected to exercise their professional abilities as learners of new and complex materials as they work together with students in developing their understanding and knowledge.

But this is more than just an attempt to raise teachers to their truly professional status. Our history tells us that the best teachers have always carried on their learning in the company and in dialogue with their students. This was the practice of Socrates, Pythagoras, and Confucius.

And when you come down to it, this is really the only way to teach someone how to learn. You have to show them by your own action. The Ancient Chinese poem says,

> How do you shape an axe handle?
> Without an axe it can't be done.
> How do you take a wife?
> Without a go-between you can't get one.
> Shape a handle, shape a handle,
> the pattern is not far off.
>
> –Shi Jing

Confucius used this poem which was already old in his time to teach his students how to teach. When you make an axe handle you use the axe in your hand as pattern. It is the model. When you teach a student, you yourself are the model of teaching and learning that the student studies.

If a student sees a teacher who is absorbed in the problems and questions of our curriculum and actively learning, the student comes to be absorbed in that curriculum as well. On the other hand if the student sees a teacher who is concerned primarily with classroom management and the transmission of a static body of knowledge, the student becomes manipulative on the model of the teacher and considers learning as something that is static, rigid, and of little relevance to his or her life.

By placing the focus of the Axe Handle Curriculum on the learning of the teacher we want to provide a model of skills in inquiry, discovery, and synthesis. We believe that the professional teacher who is actually learning together with his or her students is the only means of teaching this attitude toward life-long learning. This is why we have called our model for education the Axe Handle Academy.

Communication Is the Heart of Educational Method

By placing the focus of the Axe Handle Academy on the learning of the teacher we have merged the teacher and the students into a collaborative learning team. Now for this collaboration to work effectively the teacher must be able to model for students the communication skills and knowledge required by our Communication Studies component. The teacher/student learning team is now engaged in a joint task of observation, experimentation, analysis, and reflection. The essence of the scientific method, like all good learning consists of listening much and speaking little, of observing much but manipulating little, of remaining open to new information and avoiding premature conclusions.

In the Axe Handle Academy good teaching emphasizes modeling good communication for students. Good communication emphasizes the communication skills needed for learning which are listening, observing, and reflection.

Cooperative Competence Is a Measure of Education

With the teacher and students forming a collaborative learning team, everyone is gaining skills and concepts not part of a graded curriculum. Students are learning how to learn by cooperating with others. Their learning can be measured by the achievement of the group of which they are a functioning part.

In any learning task, there is a time when a student has no conception of the task, a time when with the help of a more competent person he or she can complete the task, and a time when he or she can perform the task independently. Learning takes place during the second stage, termed by psychologists the "Zone of Proximal Development". Before this, the student cannot even pretend to perform the task. When the student can complete the task, no learning is taking place. Therefore, it is in this middle zone that instruction should concentrate.

Educational psychologists can tell more about a child's mental development by seeing what he or she can do with a little coaching than by seeing what the child can do without help. Cooperation is not only the best means of teaching and learning, it is the best way to evaluate what a student is learning.

Cooperative competence gives each child a feeling of achievement. This feeling comes not only from being able to do something but in being able to help someone else to do it. Thus it is important for each student to work with others more competent as well as those less competent. It is easiest to accomplish this with groups made up of students of different ages.

In working toward cooperative competence, the teacher need not teach each student individually. As long as one student learns the lesson, it can be taught to everyone through chain or peer teaching. The teacher can then work independently with other students who are ready to move on.

If the team is learning meaningful things, they will want to pass on their knowledge to others in the community. Their success in doing this serves as a measure not only of their collective competence but also of their communication skills. In interacting with members of the community they will uncover new problems to investigate.

Cooperative competence thus prepares students to take on useful roles in the community and in the wider society. As adults they will be able to use their skills in cooperation and communication to solve real problems.

Enlarging the Future Is the Purpose of the Axe Handle Academy

Nearly everyone would say that the purpose of education is to prepare students for the world they will enter upon graduation. We all want students to have the knowledge and skills they will need to be mature, competent adults who have a range of options in employment or careers and who will be responsible, productive citizens. Over the years, however, we have slowly drifted from preparation to planning.

Planning is our most frequent defense against the unknown future. It gives us a sense of security and a sense that we are doing the best we can to be ready for what comes. Unfortunately, planning is really a way of limiting our imagination of the future. A plan limits our responses to predicted outcomes. With a plan we seek to control outcomes, to eliminate change, to eliminate the random and the wild. Our plans for the future dictate our current choices. A plan exercises an abstract power on the present by limiting our imagination of the options to those considered by our plan.

Preparing is different. In preparing we always expect diversity of outcomes. In preparing we assume we do not know or cannot predict what future conditions will be. In preparing we enlarge the future in our own imagination.

Both in planning and in preparing we look to the future, but in planning we seek to restrict the future, in preparing we seek to make ourselves ready. In planning we express our belief in our reason and our ability to control outcomes, people, technology. In preparing we express our belief in our adaptability, our responsiveness, our willingness to accept what comes.

In the Axe Handle Academy we emphasize preparation of our students for a future that we cannot know by giving them a solid understanding of their place on the earth, their place and identity in society, and the ability to listen, observe, reflect and then communicate effectively with others.

CULTURE, COMMUNITY AND THE CURRICULUM

by
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Any approach to educational development is a multi-faceted affair, with many dimensions on which decisions must be made, and numerous alternatives from which to choose on each dimension. Of primary importance, however, is that the alternatives selected be commonly understood and agreed upon, and that they reflect consistency from one dimension to the next. A common thread throughout most formal education programs for minority people has been the relative absence of either of these conditions. Only rarely are the ends toward which minority programs are directed made explicit, and when they are, different interpretations exist so that the means used to attain the ends are often inconsistent and sometimes conflicting.

The School and the Curriculum

The four basic dimensions of any educational program are, 1) the goals or function, 2) the content, 3) the structure, and 4) the methods used. If an approach is to be effective, all four dimensions must be functionally integrated, and consistent with the underlying processes through which they interact to form a whole. That is, each dimension must be mutually reinforcing of each of the other dimensions if the total educational experience is to be cumulative and integrative for the student. To achieve such interrelatedness requires close attention to underlying processes of education, such as communication, cognition, and social interaction. We will examine some alternative goals and content for education as they relate to those processes first, and then turn to the structure and method through which they may be attained. In each dimension we will work toward a cross-cultural approach in the development of educational programs and practices for cultural minorities.

Schools: For what purpose?

One of the most difficult, yet most important tasks in the design of any educational program is to make explicit the goals toward which the program is directed. When the task is complicated by such extensive and pervasive educational functions as those of potential interest to the school, and by the often conflicting and divergent expectations regarding schools in a minority setting, it often appears insurmountable. It is necessary, nevertheless, to attempt such a task, and we shall do so by first examining some of the goals of education in general, and then looking at the two most commonly espoused goals for minority education—"cultural assimilation" and "cultural pluralism". An alternative goal of "cultural eclecticism" will then be offered as the basis for the ensuing discussion.

In most instances, school goals are bound to universalistic intellectual or social functions associated with the dominant society. The most explicit function to which the schools are directed is to the inculcation of the particular knowledge and skills deemed necessary for individual participation in the larger society. This is sometimes refined to place a more specific emphasis on the development of the mind, with a primary concern for factual knowledge and intellectual skills. In other situations, the emphasis is placed exclusively on the development of particular occupational or practical skills. Either approach is obviously narrowly selective from the totality of human experience, and is inevitably bound to a specific cultural definition of appropriate knowledge and skills. A less direct, but often explicit function attributed to the school is that of developing "citizenship" and the appropriate attitudes and understandings necessary for participation in a democratic society. Again, the emphasis is on preparation for the roles and expectations associated with membership in the larger, state society.

Some of the least direct and least explicit functions of the school become apparent when it is viewed in the context of cultural minority education. The traditional intellectual and social functions indicated above are then confounded by the additional and seemingly invidious factors associated with cultural differences, such as conflicting values, varied learning styles, diverse behavior patterns, non-conforming social allegiances, and alternative perceptions of reality. These factors, when thrust into the amalgam of traditional school policies and practices, reveal the extent to which the school serves a concomitant function of inducing accultural ive influences in the domains of values, attitudes, beliefs and social behavior. In an effort to more directly accommodate these additional cultural factors, schools involved with minority education have been called upon to adopt some variant of the goals of cultural assimilation or cultural pluralism.

Cultural assimilation:

Though it is rarely made explicit, and is often unintended, one of the most distinguishing features of schools in cultural minority settings is their overwhelming press toward assimilation into mainstream cultural patterns. Whether intentional or not, the basic thrust of schooling is toward the breaking down of particularistic orientations and developing in their place, a universalistic orientation. Even where accommodations are made to include ethnic studies or bilingual education in the curriculum content, the structure, method, and processes through which the content is organized and transmitted are usually reflective of mainstream patterns and exert a dominant influence on the student (cf., Bayne, 1969). Schools are agents of the dominant society and as such, they reflect the underlying cultural patterns of that society. As long as they reflect the structure and social organization of the dominant society, they can be expected to perpetuate its values, attitudes, and behavior patterns within an implicit framework of assimilation.

What then, does a school goal of assimilation have to offer the cultural minority, and what are some of its limitations? On the surface, a cultural assimilation orientation would seem to offer the minority student an opportunity to gain access to the skills and resources necessary to participate in the larger society on equal terms with others. This expectation often goes unfulfilled, however, because of the school's inability to adequately respond to the differences in learning styles associated with differences in thought, communication and social interaction on the part of the minority student. Consequently, the requisite skills are not learned, status differentials are reinforced, and access to societal resources is further impeded, thus thwarting the minority students' aspirations. The school cannot contribute effectively to the assimilation process without careful attention to the unique cultural conditions out of which the minority student emerges.

If assimilation is desired and is to be achieved in full by a cultural minority, it must be supported by social, political and economic forces beyond those available through the school. Though the school may serve a useful, and even necessary function in the assimilation process, it cannot accomplish the task alone (cf., St. Lawrence and Singleton, 1976). If cultural assimilation is not desired, alternative goals must be adequately articulated so as to be able to assess the extent to which schools may or may not be able to contribute to their attainment. One such alternative goal that has received widespread attention is that of cultural pluralism.

Cultural Pluralism:
Whereas assimilation stresses the ways of the dominant society, cultural pluralism is intended to stress the ways of the minority society. Cultural pluralism is advocated as an educational goal by those who seek a pluralistic, multi-cultural society in which each ethnic, racial or religious group contributes to the larger society within the context of its own unique cultural traditions (cf., Banks, 1976). The school's task, therefore, is to recognize the minority culture and to assist the student to function more effectively within that culture. Heavy emphasis is placed on ethnic studies and minority language programs, but, as pointed out earlier, these are usually offered within the traditional structural framework of the school and have only tangential effect in terms of minority development goals. The primary beneficial effects are in the symbolic implications of the formal recognition of the minority group's existence by the school, and in the access to broader societal resources and experience by the minority group members who are employed to carry them out. Such access can result in positive influences of minority groups on the functioning of the school.

As presently espoused, however, with an emphasis on cultural autonomy and homogeneity, cultural pluralism falls short of being a realistic goal toward which the schools may direct their efforts. In addition to participating in various ways in the cultural traditions of their own society, most (if not all), minority group members also participate in varying degrees in the cultural traditions of the larger society. To maintain true cultural pluralism, a structural separation of cultural groups must exist (Gordon, 1964), and this is not the case in American society, with the school being but one example of structural interaction. Different cultural groups interact with each other in various ways for various purposes, resulting in diffuse acculturative influences and constant adaptation, within the context of a national social order. Under such conditions, the goals of education must necessarily extend beyond minority group boundaries, if the student is to be prepared for the larger social reality s/he will face as an adult.

Even if cultural pluralism were to be viewed as a realistic goal (and it may be, under certain conditions of oppression), we would still have the problem of using an institutional artifact of one society (i.e., the school) to promote the cultural traditions of another. To change the subject-matter (content) without a concomitant change in the structure, method and processes through which that content is conveyed, may in the end, only strengthen rather than weaken the influences of the larger society. To achieve educational independence does not necessarily lead to cultural independence, if the educational experiences remain within the structural framework of the dominant culture.

It would appear then, that neither extreme of complete cultural assimilation or separation is appropriate or adequate as an educational goal, nor are either realistically attainable through the traditional framework of the school. We must, therefore, seek an alternative goal that rests on the middle ground between assimilation and pluralism, and then devise a means by which such a goal might be achieved.

Cultural eclecticism:

Since there are features of both the assimilationist and pluralist perspectives which seem desirable in developing educational programs for minorities, we will devise an eclectic approach, which allows for minority selection and adaptation of those features which they deem most desirable, and attempts to overcome the previously stated limitations. The goal of this approach will be referred to, therefore, as "cultural eclecticism." This is not to imply that the school is to present a hodgepodge of cultural practices from which students choose at whim, but rather that the school will assist the student in understanding the nature of the diverse experiences which are a natural part of his/her existence, and thus contribute to the development of an integrated cultural perspective suitable to the student's needs and circumstances.

In developing an eclectic approach, we are assuming that each minority group has unique characteristics that distinguish it from other groups, and that all groups share characteristics common to the larger society. We are also assuming that variations exist within and between groups, in orientation toward minority vs. dominant cultural characteristics. Some individuals and some groups wish to stress the minority culture, while others are oriented toward the dominant culture, with still others desiring the "best of both worlds." Our concern then is with the development of an educational approach that respects this vast diversity, while introducing everyone to the range of options available, so that they themselves are able to exercise some degree of choice in their individual or group life style and goals. Such an approach must recognize the multifaceted and dynamic nature of a large, complex, open, continually evolving society, and must allow for the varied cultural expressions of ethnic, religious and political beliefs and practices within the broader framework of that society. It is through such variation and diversity that the vitality of the society at large is maintained, and our understanding of the range of human potential and capabilities is deepened. We are building, therefore, on the notion of "multiculturalism as the normal human experience" (Goodenough, 1976) and are attempting to make evident and accommodate to a condition that already exists, but is largely ignored.

Thus, we present a goal of "cultural eclecticism" for minority education, in which features of both the assimilationist and pluralist ideologies are incorporated with the emphasis on an evolutionary form of cultural diversity to be attained through the informed choices and actions of individuals well grounded in the dynamics of human and cultural interaction processes. Eclecticism implies an open-ended process (rather than a dead-ended condition) whereby individuals or groups can adapt and define the functions of the school in response to their changing needs, assuming that they understand those functions and are in a position to influence school programs sufficiently to make them fully compatible with their needs. How then, might the school be made flexible enough, in structure and method, as well as content, to accommodate such potentially diverse demands?

To respond to that question, we will build upon the perspectives outlined above, seeking ways to restructure the social organization of the school so as to foster a closer linkage between socialization and formal education processes. To accomplish this, we will work toward an experiential, community-based approach to learning, in which what is learned derives its meaning from the context in which it is learned. We will begin with an examination of instructional content, since the structure and method we develop should be built upon and consistent with what it is we are trying to teach. The content should, in turn, reflect the full range of processual and situational features necessary to achieve the goal of cultural eclecticism. With such a goal in mind, we will turn now to the development of a curriculum framework for minority education.

Curriculum: Process and Content

Curriculum, in its conventional usage, refers to the "scope and sequence" of the subject-matter conveyed in a school. Curriculum development, therefore, generally focuses on the selection and organization of specific knowledge and skills to fit particular developmental needs of the student and the unique operational structure of the school. Curriculum development usually does not explicitly address the social context in which learning takes place, nor does it consider the underlying cultural processes by which the content is acquired and utilized. These considerations are usually implicit to the cultural framework from which the curriculum is derived, with the school considered a "given" in that framework.

As the previous discussion has indicated, however, content, context and process are all intertwined, so that any one dimension can be affected by cultural variables and thus affect the outcome of the educational process. In the context of this discussion, curriculum development will, therefore, encompass all discernible dimensions that enter into the determination and implementation of the directed learning experiences by the school. From this perspective, the scope and sequence of the curriculum will be extended to include the interaction between content, process and context, and thus go beyond the usual culture-bound determinations that are associated with an emphasis on content alone. The approach developed here will proceed from an assumption of the unique social and cultural conditions of the child as a "given," rather than the universality of a particular body of knowledge or a particular mode of learning. We will begin the discussion on the latter assumptions, however, with a look at the subject-oriented approach currently reflected in school curriculum, and then move toward a more cross-culturally applicable alternative.

The subject-oriented curriculum:

The approach to curriculum design currently reflected in the schools is drawn from the classical Western tradition of the categories of knowledge. In their most general form, these categories are represented by the major academic disciplines of the humanities, social sciences, natural sciences, mathematics, languages, and aesthetics. In their more specific form, they are represented by the list of typical subjects taught in the schools today. At the elementary level, this includes subjects such as the language arts (reading, writing, spelling), arithmetic, science, social studies, and art. At the secondary level, the categories become more specialized with subjects such as history, literature, algebra, biology, drama, and French. If a secondary program includes a vocational emphasis, the curriculum may extend beyond the knowledge categories to include a variety of occupational skill-oriented subjects, under general headings such as industrial arts, distributive education (business), home economics, or agriculture.

In all of these subjects, the emphasis is on transmitting a predetermined body of knowledge or a particular set of skills from those who possess such knowledge or skills to those who do not. Thus, to a large extent in a subject-oriented curriculum, the learning process becomes subordinate to, or is determined by the nature of the content. Such an approach to curriculum presents at least two sets of problems in minority education, one in regard to content, and another in regard to process.

The content problems derive from the presumption that the classical Western categories of knowledge are universally applicable and can be appropriately adapted to any learning situation. In an examination of the academic disciplines as a basis for curriculum planning, Lawton (1975: 72) identifies four different justifications for their use:

1) Because reality is like that. The disciplines are presumed to be close approximations of how the "real world" is organized.
2) Because different sorts of questions are being asked. The various disciplines use different approaches to gain alternative perspectives on the world.
3) Because children develop in that way. The disciplines reflect the processes by which children classify experience.
4) Because disciplines promote more economical learning. The disciplines provide a structure for organizing and disciplining thought, and thus, simplify understanding.

Such justifications for the disciplines may be considered adequate if viewed within the context of a culturally uniform and stable Westernized society. They do not, however, take into account the confounding variables created when the disciplines are confronted by cultural perspectives divergent from those reflected in the Western categories. The categories used to analyze and organize reality from an academic perspective often have little relation to the categories required to carry out the functions of everyday life and, therefore, often appear irrelevant or artificial outside the academic context. If the categories of learning employed by the school cannot be tied to the experiences of the student, they will not stimulate much interest or understanding.

Another problem with the subject-matter approach to curriculum content has to do with the emphasis on static, discrete knowledge and skills in a rapidly changing and expanding social and cultural environment. Although the subject areas of the curriculum are occasionally updated (often in a piecemeal fashion, however) to account for new understandings and changing societal conditions (e.g., "new math," computer programming, or "modern art"), much of what is taught remains rooted in out-moded knowledge and obsolete skills. An emphasis on knowledge and skills will inevitably reflect a lag between what is known and what is taught, and thus provide little preparation for the changing conditions of the future, and may even necessitate unlearning as new conditions are encountered.

In addition, the subject approach separates knowledge into discrete categories which are dealt with independently of one another, disregarding the overlap and inter-connectedness between subjects. The student who is not acquainted with the cultural patterns that would normally serve to integrate academic subjects with one another and with reality, will find their content disjointed, unpredictable, and thus of little value. The task of transforming academic subjects into a meaningful and coherent educational experience is difficult enough with Anglo students who are presumably already familiar with the requisite underlying cultural patterns of organization and use. To do so with minority students for whom such "equivalence structures" may not be available requires more resources than are available to the teacher or the school. Modifications in content or teaching method to make the subjects more palatable or to "fit the student's abilities and interests," are of minimal value without situational and processual changes as well.

This brings us to the process problem associated with the subject-oriented curriculum. This problem derives from what Freire (1971) has critically labeled the "banking concept" of traditional schooling, in which "knowledge is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing" (p. 58). Though Freire presents his case in the framework of cultural oppression, his analysis of the attitudes and practices that accompany a traditional educational approach is not limited to such conditions. He lists the following as characteristics of the banking concept of education (p. 59):

a) the teacher teaches and the students are taught;

b) the teacher knows everything and the students know nothing;

c) the teacher thinks and the students are thought about;

d) the teacher talks and the students listen—meekly;

e) the teacher disciplines and the students are disciplined;

f) the teacher chooses and enforces his choice, and the students comply;

g) the teacher acts and the students have the illusion of acting through the action of the teacher;

h) the teacher chooses the program content, and the students (who were not consulted) adapt to it;

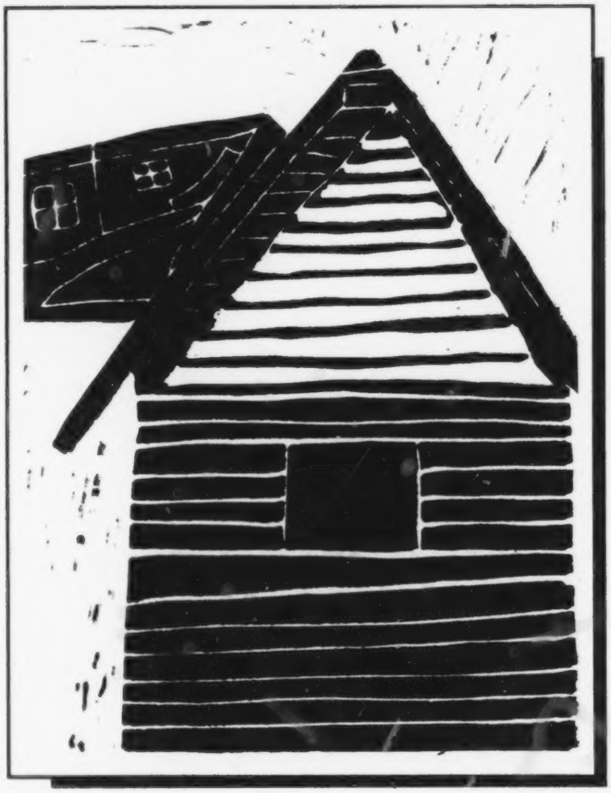
i) the teacher confuses the authority of knowledge with his own professional authority, which he sets in opposition to the freedom of the students;

j) the teacher is the subject of the learning process, while the pupils are mere objects.

Though this may state the condition in the extreme, it illustrates how the academic world of knowledge and learning can become disassociated from the experiential realities outside the school, and potentially interfere with the student's own processes of inquiry. When viewed in a minority context, the implicit patterns of interaction and cultural assumptions that are reflected in the banking concept (as an expression of the subject-matter approach), are clearly stacked against the student. The teacher's authority is predominant and the student's role is that of passive recipient.

The problem lies not with the teacher or the student, but with the structural framework within which the teacher and student interact. The educational process leaves little room for accommodating to the unique cultural and situational needs of the minority student (cf., Chance, 1973). Even when the curriculum content is opened up to include subject matter electives such as "ethnic studies" or "bilingual education," the content is still cast in the structural and processual framework of prevailing educational ideology, with only limited opportunities for alternative categories of reality and patterns of interaction to be included. Community patterns and categories are modified to fit the framework of the school, rather than the school modifying its patterns and categories to fit the framework of the community. In effect, all responsibility for establishing equivalence structures is relegated to the student.

The subject-oriented curriculum appears to be inadequate, therefore, in both content and process of instruction, for the educational needs and circumstances of cultural minority students. The content is often divorced from the experiential and situational framework of the student, and the resultant process is usually culturally biased. Such an approach to curriculum design obviously cannot contribute much to the goal of cultural eclecticism. If we are to overcome these limitations, we must seek an alternative form of curriculum content that is applicable to a wider range of cultural conditions and allows for greater flexibility in the processes of instruction.



A process-oriented curriculum:

One approach to the alleviation of some of the problems of a subject-oriented curriculum in minority education becomes evident when we rephrase the core curriculum development issue of "What should the schools teach?" to "How do the students learn?" The emphasis is immediately shifted from content to process, and from the school to the student. Such a shift does not negate the need for content, but recasts it as a means, rather than an end, and it establishes the student's need to learn as the determinant of the instructional process. We must, therefore, anticipate the varied and changing needs of the student, and provide a curriculum that can accommodate to those needs. If students are to be prepared to cope with new and changing conditions, they must be exposed to more than current factual knowledge and occupational skills. They must be familiar with the generalized processes by which such knowledge and skills are acquired and utilized under new and unforeseen conditions. They must learn, for example, how to think, communicate, organize, interact, make decisions, solve problems, and assign priorities, but most of all, they must learn how to learn.

A curriculum design built around processes such as these can, in addition to better preparing a student to encounter the unknown, accommodate a wider range of patterns by which an understanding of present and future conditions may be acquired and utilized. An open-ended, process-oriented curriculum is potentially less culture-bound, and thus may be more readily adapted to alternative settings without intruding on their cultural and situational variability. If appropriately conceived, process skills can be taught by building on those patterns indigenous of the background of the student, and then extending the processes to include the patterns of the wider community. To the extent that a minority student is able to employ such process skills in his/her daily encounters within his/her own and the larger society, s/he will be better able to blend those encounters into a lifestyle and world view that will contribute to the goal of cultural eclecticism.

Obviously, this can happen only under conditions in which the social, cultural and institutional milieus are able to nurture the development and exercising of such skills—conditions which are not easily attainable in the society at large, let alone in minority communities. As a step in that direction, however, the schools can formulate a curriculum that has as its purpose the development of process-oriented persons who possess the intellectual and social skills indicated above, and consequently, "are able to handle themselves and the situations of which they are a part with adequacy and ease" (Berman, 1968: 10). Just as the persons who make up contemporary society must possess a degree of flexibility, adaptability, creativity, and tolerance to accommodate to rapidly changing conditions, so must the curriculum reflect such characteristics if it is to effectively contribute to the educational development of those persons. Processes, with their open-endedness and capacity for self-renewal, can provide the basis for such a curriculum design.

Process, in its general sense, may be defined as "a function of change in the relationships among variables" (Kimball 1976: 269). More specifically, when applied within the domain of human influence, process refers to the use of particular rules, methods, procedures, actions, or operations to reorganize events, conditions, or energies toward some end. Within the context of education, "process" may be further restricted to refer to "the cluster of diverse procedures that surround the acquisition and utilization of knowledge" (Parker and Rubin, 1966: 1). Since our interests here are not in the full range of natural or man-made processes encompassed by the first two definitions, we will settle on the latter definition, but include in our discussion the social as well as intellectual processes associated with teaching and learning. In that context, we may consider processes at two levels—in terms of process as content, and in terms of the processes of instruction.

At the first level, we are concerned with the content of education. If process skills are to become the "end" and the content is to serve as a means to that end, then the content itself should be organized around processes. In a process-oriented curriculum, therefore, processes should be reflected in the content, so that what is taught is consistent with the goal toward which the teaching is directed. One way by which this may be accomplished is to replace the traditional list of academic subjects with a list of appropriate general processes and devise an educational program aimed at developing an understanding of those processes. Such a process-oriented curriculum could overcome many of the limitations of the traditional subject-oriented approach. An outline of the content of such a curriculum is offered by Berman (1968), who identifies the following process skills as the minimum essential ingredients: perceiving, communicating, loving, decision-making, knowing, organizing, creating, and valuing. In her model, these skills would serve as the core around which the educational program would be organized. She presents several alternative organizing schemes, some that emphasize processes alone, and others that blend processes with the traditional subjects.

Another effort to employ process as content in school learning is that of Parker and Rubin (1966), who summarize the tasks to which process-oriented curriculum developers must address themselves as follows:

> 1) A retooling of subject matter to illuminate base structure, and to insure that knowledge which generates knowledge takes priority over knowledge which does not.
>
> 2) An examination of the working methods of the intellectual practitioner; the biologist, the historian, the political scientist, for the significant processes of their craft, and the use of these processes in our classroom instruction.
>
> 3) The utilization of the evidence gathered from a penetrating study of people doing things, as they go about the business of life, in reordering the curriculum.
>
> 4) A deliberate effort to school the child in the conditions for cross-application of the processes he has mastered—the ways and means of putting them to good use elsewhere (p. 48).

They too, offer several models for incorporating processes into the standard curriculum, with a particular focus on the reformulation of subject-matter to emphasize the underlying structure, rather than the surface features. They seek to use subject content to acquaint students with the processes by which knowledge is formulated and put to use. Their concern, therefore, is with inquiry processes, such as analysis, inference, classification, synthesis, integration, and evaluation. They caution, however, that extensive study is necessary before we can determine which processes may be appropriately incorporated in the curriculum. "What seems most clear is the pressing need to research the kinds of processes inherent in different subject matter and to determine how and where they are most useful to the purpose of the school" (p. 51). The tendency to limit process education to the intellectual domain (cf., Cole, 1972) is one of the drawbacks that needs to be overcome if such an approach is to address the broader communication and social interaction processes referred to earlier.

Both of the approaches to a process-oriented curriculum described above go a long way in reorganizing the curriculum content to shift its emphasis into a process framework which is more readily accommodating to the learning needs of minority students. Neither approach, however, goes far enough in addressing the second-level question of "How are these process skills to be learned?". To change the content of the curriculum to include processes is not adequate if the structural framework in which those processes are to be learned is not itself changed to reflect the process emphasis. If students continue to sit in a typical classroom setting, under the authority of a teacher, and proceed to learn only about processes, in the same manner in which they learn about history or science, they will not make much progress over the traditional subject-oriented curriculum. Parker and Rubin point out the need for an alternative teaching approach when they state that "the requirements posed by a process-based curriculum deal primarily with the identification of worthwhile processes to which students should be exposed, the design of instructional strategies that make effective use of the processes, and the realignment of subject matter so that it complements the instructional strategies" (p. 44). Berman also acknowledges the need for a revised approach to teaching in her statement of the conditions necessary to acquire process skills. She lists those conditions as:

> 1) the opportunity to experience the use of the skill in a wide variety of contexts and,
>
> 2) the chance to verbalize the meaning of the skill so an interplay can exist between the logical and the intuitive (p. 10).

The experiential emphasis implied by Berman coincides with the need to bring schooling in closer alignment with community socialization processes. What we need then is a way to link the content of a process-oriented curriculum to the experiential and situational framework of everyday life, so that what is learned and how it is learned can be more effectively merged into a meaningful whole. We also need a flexible and adaptive curriculum design that will accommodate the diverse needs of minority students, and that can be incorporated into a school program in various ways and to various degrees, since the existing curriculum is not likely to be wholly transformed to accommodate a totally different approach. As a means of synthesizing the promising aspects of the approaches described above into a coherent framework for minority education, we will focus now on the development of a project-centered curriculum design.

The project-centered approach:
We now have two frameworks within which to establish curriculum content categories and organize learning activities—the subject-oriented curriculum built around the academic

disciplines, and the process-oriented curriculum built around the procedures associated with the acquisition and utilization of knowledge, though the latter needs to be expanded to include social processes as well. The subject-oriented approach appears to be least accommodating to the immediate needs of minority students, but it has the force of tradition behind it and serves functions compatible with the needs of the society at large, and, therefore, cannot be disregarded. The process-oriented approach, on the other hand, has greater potential for the adaptation of curriculum content to fit varied cultural settings, but does not adequately move that content into an everyday experiential framework where it can be tested against reality and put to use.

As a means of integrating the useful features of the subject and process orientations outlined above and putting them into a functional experiential framework for minority students, we will explore a project-centered approach to curriculum design and instruction. In pursuing such an approach, we are seeking to establish a framework that has maximum flexibility, so that it can be used at all levels, in varying situations, and to any degree considered desirable or appropriate by the school and/or community.

The term project, as used here, refers to a planned task or problem undertaken by one or more persons for the purpose of achieving some goal. A more specific definition is provided by Harrison and Hopkins (1967: 455) in reference to a cross-cultural training program, where "project" is used to refer to a process-oriented activity requiring a learner to:

1) Obtain information from the social environment (communication);
2) Formulate and test hypotheses about forces and processes present in the environment (diagnosis);
3) Select and describe some part of the situation which is to be changed or altered (problem definition);
4) Plan action to solve the problem (commitment, risk-taking);
5) Carry out the action, enlisting the help and cooperation of others (influencing and organizing);
6) Verbalize attitudes, perceptions and tentative learnings from the experience (cognition and generalization).

Though Harrison's and Hopkins' description focuses primarily on problem-solving activities, the listing of processes (in parenthesis) associated with each step of the activity illustrates how effectively content, process and experience can be integrated in a project approach. The content is not considered in an isolated context, but is assessed in terms of its functional contribution as a means to the solution of the task at hand. Content and process cannot be dichotomized in a project approach, because they are implicit to one another and to the approach itself. Likewise, to engage in a project implies engaging in some form of experiential activity, so that all the requisite characteristics for a productive learning experience are merged in the project approach. The task, then is to determine how such an approach can be incorporated into educational programs, particularly in a cultural minority setting.

A primary virtue of the project-centered approach is its nearly unlimited flexibility. A project can take almost any form: it can be a lesson plan, a unit, or a year-long effort; it can take place inside or outside the school; it can involve one student, a class, or the whole school; and it can be incorporated in nearly any subject or learning activity. Examples of some common educational practices that reflect aspects of the project approach are field trips, work/travel/study programs, internships, practicums, and apprenticeship programs. Although these are not often organized as formal projects, they all engender some sort of loosely defined experience-based learning through active involvement in a flexibly structured activity. The students, therefore, have a great deal of flexibility in defining the nature of their participation and pursuing their own avenues of interest. Most of the examples listed, however, are usually employed outside of, or incidental to the formal educational framework of the school and, thus, do not adequately utilize the full educational potential of a project-centered approach.

If a project-centered approach is to be effectively utilized to carry out a substantial part of the educational responsibilities vested in the school, then the projects themselves will have to be deliberately and carefully planned with particular learning tasks in mind, blending the academic functions of the school with the cultural patterns of the community. Projects will have to be developed that incorporate and blend, implicitly or explicitly, the subject and process skills determined appropriate and necessary for the students involved. A project such as a school store, for example, can combine subject skills in math, business and language, with process skills such as organizing, planning, decision-making and interacting. A class project conducting a survey of energy consumption in the community can incorporate elements of science, math, and social studies, along with processes of problem-solving, communicating, analysis and evaluation. Any combination of knowledge, skills or processes may be represented in a particular project. The important thing, however, is not which of these specific ingredients are involved, but whether or not the experience gained from involvement in the project is contributory to the educational needs of the individual student, the local community, and the society at large.

One of the best (and only) examples of the use of a project-centered approach for a total education program is provided by Helser (1934), in his description of what he calls a "meaningful experience curriculum," as developed for the rural Bura people in northeastern Nigeria. Though the specific content of Helser's curriculum is not always transferable to a contemporary minority setting in America, it does provide a useful illustration of how a project approach may be applied to a specific set of conditions and problems. The children in Helser's program spent about half their time on school projects and the other half on home and community activities in which these projects "take on flesh and blood" (p. 23). His primary purpose was to build an experience-based educational program around the conditions in which the children lived, utilizing local as well as outside resources, to help them become contributing members of their community, as well as of the national society. He sought to foster "appreciation of various situations and wholesome attitudes toward situations, along with controls and specific skills" (p. 35).

To accomplish this he built a curriculum, with the help of community members, around four general areas (home and social life, health, agriculture and livestock, and crafts), each of which served to generate a series of "problems". Each problem was presented to the students as a task for inquiry in school, as well as a task toward which they addressed their energies outside of the school. Thus, the schooling process was closely linked with local patterns of interaction, communication, and socialization. Some examples of problems addressed in Helser's curriculum are as follows:

1) What difference does it make where a compound is built?
2) Why do crowds of people go to market?
3) How can we be strong?
4) Where can we have our farms?

5) What can we make from the skins of animals?

The extent to which this curriculum linked school life with home life is illustrated by the list of "objectives" Helser associated with the problem of, "How much corn ought each family represented in the class have in order to have enough to last throughout the year?" (p. 217).

a) To create interest in the vital question of an adequate food supply.

b) To learn to calculate the approximate number of granaries and the approximate number of baskets of corn in each compound in the community.

c) To learn to take more interest in the work of the homefolks.

d) To learn to calculate the number of baskets of corn per person in each compound.

e) To see what a shortage of corn means.

f) To discover how much corn the average family should have.

g) To find out the number of granaries required to hold the family's supply of corn.

h) To determine the most desirable size of granary.

i) To see the relation between the piles of pebbles and the numbers on the blackboard.

j) To appreciate the desirability of being able to calculate in the sand or on the blackboard or on paper.

k) To get the thrill of helping to make a community chart.

l) To do a valuable piece of work for each compound in the community.

This single project brought together a wide variety of subject matter and process skills and focused them on a real-life issue in that community. The learning that took place was for the purpose of solving the problem, not to make a good grade or to please the teacher. The project incorporated valuable learning experiences with a useful social function, thus helping students learn new skills while addressing a problem in a way that fit their particular cultural and situational needs.

Helser's summary of the "curriculum principles" upon which a project approach should be built reflects many of the points to which this article has been addressed and therefore, is included here in its original form (p. 304-305).

1) Educational aims should arise out of a study of the life needs of the child and his environment. All that makes life richer and more abundant which other agencies are not supplying should be the responsibility of the school.

2) Educational aims should include the ideals, attitudes, dispositions and appreciations to be striven for, as well as those for knowledge, habits and skills. The analysis of these aims should be continued until they are reduced to units small enough to be specifically worked for in the activities requiring them.

3) Educational aims should cover every phase of essential life experience and make possible healthy living and surroundings; helpful home membership; wider social interaction and sharing; an understanding of the privileges and the responsibilities of citizenship; appreciation of the world's practical and intelligent use of its products; such use of leisure time that it truly recreates and invigorates; such ethical and religious ideals as will develop socially valuable character and service, and such command of fundamental processes and techniques as will enable the individual to successfully meet and solve difficult problems and activities.

4) Educational aims should include not merely the adjusting of the child to his environment, but the development of such attitudes and abilities as will enable the child to adjust the environment to meet his higher ideals, wants and appreciations.

5) True simplification of the curriculum involves a conception of education as growth and life. The school should be thought of as a place where pupils may receive stimulating guidance and help in carrying out their valuable environmental activities, so that they may not only successfully complete them, but profit by all the moral, social and accessory interests which arrive.

6) Changed ways of behaving (conduct) should be the test for learning, rather than the oral command of subject matter. If this is to result, the emphasis in teaching must be upon the actual living through a valuable experience, rather than the mere reading about it.

7) The school environment and procedure should be such as to emphasize the purposing of worthwhile activities, the developing of them on the child's level of interest, and his need for them here and now, rather than as a preparation for the vague future.

8) Subject matter should be thought of as the vital experience necessary for the child's fullest enjoyment and understanding of life. It should be used to supplement the child's own experience, the old and the new being organized into the necessary new way of behaving. Such supplementary experience should come from the local inheritance and from world culture. The test of its value to the child is the extent to which he can use it in furthering his activities and in securing more satisfying and effective

9) The curriculum for the first four years of school life should be general, in the sense of providing a common equipment for life and citizenship for all pupils, with the fullest use of the local environment as a starting point and as a source of interests and materials in furthering the educative process.

Helser's detailed description of a project-centered approach to education points out that it is not a new approach, but it is one that is particularly well suited and adaptable to cross-cultural situations, because of the experiential linkage it can provide between school learning and cultural practices. While his is but one example of how it might be employed, it indicates the potential of a comprehensive project orientation where a large part of the program is built around projects, rather than a limited number of projects being built into some component of a conventional program. A project-centered approach does not preclude the necessity for more formalized forms of learning activities at various stages, but the attention is shifted from the use of projects as a supportive activity for academic learning, to academic learning as a supportive activity for projects.

To the extent that a program is project-centered and process-oriented, it has the potential to accommodate learning to situational and cultural differences and to prepare students to cope with future life experiences. It is through the flexible use of projects as a means for structuring process-oriented learning experiences linking school and community, that schools can assist minority (and majority) students and communities in achieving the self-determining goal of cultural eclecticism.

While the focus of this section has been primarily on goals and content issues, the more critical features of a project-centered approach are reflected in the actual social organization of the educational setting (structure), and the experiential processes by which learning is achieved (method)—topics which will be addressed in greater detail in the next section. As indicated earlier, the goals and content of an educational approach must be made explicit before the appropriate structure and method can be developed. Having established "cultural eclecticism" as the goal, "processes" as the content, and "projects" as the means, we can now pursue the situational and cultural implications of alternative approaches to structure and method, which together make up the instructional process.

The Community and the Classroom

In seeking to develop an approach to education that has the potential for application to varied cultural and situational conditions, we must go beyond the simple revision of curriculum content or classroom teaching practices. We must take into account the interactional setting itself, and find ways to restructure the social organization of that setting to allow the participants to pattern their interaction to fit the goals they are attempting to achieve. As with the content, we need a structure that is flexible and adaptable enough to accommodate a wide range of cognitive, communicative, and interactional patterns, while maintaining some degree of order and continuity in terms of overall direction and effort. We will, therefore, examine the suitability of formal education as a vehicle for addressing structural and methodological issues in minority education.

Teaching and context: The situational variable

In the development of a social structure for an educational program, we must take into account the contextual features of the settings in which learning is to take place, because context is a major influence in the shaping of any learning process. Of particular concern are the varied cultural and situational patterns reflected in the learning experiences associated with school vs. community settings. Is one type of setting more appropriate than another for particular kinds of learning experiences? The features of formal vs. informal education indicate that the social structure of the school is best equipped to support academic, subject-oriented learning, whereas the natural community setting is most appropriate for experience-based, process-oriented learning. Though schools may engage students in active learning experiences and deliberately attend to certain learning processes, if that learning remains within the detached and unique social context of the classroom, it remains subject to the distortions associated with transference from an academic to a real-world setting. The process skills most effectively learned in a school context are those required to continue school learning and to function in an academic-oriented environment. Process skills required to function in daily life outside of the school setting can be most effectively practiced and learned in a broader community context. The more natural the situation in which learning takes place, the greater the potential for integration with the functional learning system of the learner, and the less the potential for distortion in the transfer of such learning to future situations.

Let us look then, at some different approaches to the merging of community and school experiences in the development of educational programs. We will look first at efforts to shift formal processes of education to "nonformal" contexts, and then at an attempt to recreate a "micro-society" within the formal structure of the school. Finally, we will examine a combination of those two approaches as reflected in the "school without walls" approach.

Nonformal education: In addition to the institutionalized form of education reflected in the school, there are other forms of organized, formal educational activities in which persons may participate at various stages in their life, such as youth clubs, adult literacy programs, apprenticeship programs, and cooperative extension programs. Since these usually take place outside the formally organized educational system, they are sometimes referred to as "nonformal" education, even though they often involve formalized processes. In its usage, nonformal education tends to be restricted to the discussion of occupational training in the context of economic, human resource, or manpower development in developing countries. In most cases it is viewed as an extension of, or complementary to the formal educational system, and serves as a means for translating formal learning into marketable skills. This interrelatedness is indicated by some of the questions posed by Harbison (1973: 7-8) in regard to planning a nonformal education program:

1) Can nonformal education activities satisfy educational needs that cannot be met by the formal education system?
2) Are nonformal education projects, because of their flexibility in comparison with the rigidities of formal education, more susceptible to innovation?

3) Do successful innovations in nonformal education induce desirable innovations in the formal education system?

Harbison goes on to conclude that, "In some cases, nonformal education is the only practical means of skill and knowledge development; in others, it offers an alternative, and often a more effective one, to education and training in formal schooling; in most cases, it can supplement, extend, and improve the processes of formal education" (p. 11).

Nonformal education may, therefore, offer a model for adapting formal education to the informal context of the community. To determine its potential, we will take a closer look at some of the assumptions and characteristics reflected in a nonformal approach.

Brembeck (1973), in an analysis of the uses of formal and nonformal education, provides the following premises as the basis for the development of nonformal education programs:

> ...learned behavior is determined by the environment in which it takes place. Behavior is shaped and maintained by its consequences. The learning environments of formal and nonformal education tend to be of a different character. They shape and maintain different kinds of behavior. The goal, then, of educational strategy should be to determine the kind of behavior sought and create those educational environments which most clearly support and encourage it (p. 63).

Whereas formal learning tends to focus on the detached acquisition of knowledge, nonformal learning is geared to action and the application of knowledge. The structural characteristics of nonformal education "derive from its proximity to immediate action, work, and the opportunity to put learning to use. These elements of the environment close the gap between learning and doing, find intrinsic motivation in the learning situation, imbed objectives in work and activity, and associate learners and teachers in meaningful lines of action" (p. 58).

Nonformal education thus, has many of the characteristics we are seeking in the development of an alternative educational approach for cultural minorities. It draws on community resources, incorporates experiential learning, allows considerable flexibility for varied types of learning experiences, and provides opportunities for student and community influence on the form and direction of learning (cf., Paulston, 1973). It provides a structural framework consistent with that required for the project-centered, process-oriented approach toward which we are working. In fact, many nonformal education programs, such as 4-H clubs, Boy Scouts and home extension services, do actively employ projects as a primary vehicle for their educational efforts. The task then, is to expand the use of such projects so that the structure of nonformal education can be extended to encompass more of the functions currently carried out by formal schooling.

The persistent calls for school reform would seem to indicate that there is a continuing need for a thorough rethinking of the fit between structure and function in educational processes. Brembeck emphasizes this need in calling for a careful assessment of the capabilities of both formal and nonformal education before the latter is put to widespread use.

> ...both formal and nonformal education have built-in structural elements which condition their capabilities to contribute in defined ways to the attainment of certain educational objectives. Perhaps the fundamental task is to analyze more precisely the structural properties of each, to determine the potential of each for contributing to particular kinds of educational goals, and to build programs

> which utilize these strengths within a more unified and coherent policy of educational development. If this were done, investments in both school and nonschool education might yield better payoffs (p. 55).

Whereas nonformal education attempts to move learning out into the community, it may also be possible to move features of the community into the school to enhance learning experiences. In reference to schools, however, Brembeck indicates that "their success as places of learning depends in part upon their ability to recreate within their walls a learning environment as naturally compelling as that existing on the outside. That environment must be created; it is not naturally built into the structure of school learning" (p. 60). Though teachers often attempt to recreate bits and pieces of the community environment in the school, seldom do they go beyond superficial aspects, and even less often are their efforts part of a comprehensive and well-thought-through plan. One exception to this is the "micro-society" school, devised by George Richmond (1973).

The Micro-Society approach:

Richmond, while working in the public schools of New York City, devised an approach to schooling that attempted to recreate critical aspects of society in microcosm in the context of the school. He, with the help of the students, created social learning experiences such as the micro-economy game, the micro-capitalist society, micro-politics, and a judicial system, all within the social and academic framework of the school. He sought to "create a society small enough for the student to manage and large enough to breed the kind of expertise that convinces individuals that they can have some measure of control over the environment" (p. 275). Instead of moving learning out into the community, he attempted to create a sense of community within the school. He describes the premises for such a model of schooling as follows:

> As an approach, it must be a dynamic process, one that will liberate students from a curriculum without any apparent fit to life, one that will orient students to jobs in the service industries and the professions, and one that will obtain for students a better appreciation of the world of experience. The process must have the power to penetrate the classroom and alter its way of life. In so doing, it must make the inmate-custodian operating in many traditional schools untenable. And although the connection with work bears emphasis, the model must also offer students opportunities to become involved in academic pursuits, in recreation, in civic projects, and other productive activity (p. 189).

Thus, through a simulated situation, Richmond attempts to bring the school into a closer alignment with conditions in the surrounding community. Though he retains the broad framework of the school, he seeks to modify the content and method of education to improve its usefulness and effectiveness. Instead of studying the society around them, students and teachers engage in the evolutionary process of creating their own model of society and coping with the economic, social and political exigencies that such an effort entails. Gradually, as the school society expands, it incorporates characteristics of the surrounding environment. "As the Micro-Society matures, the school will integrate aspects of the local community—for example, ethnic traditions—with the traditions it evolves as a separate society. At more advanced stages still, students and student groups based in the school will explore ways and develop the means to contribute goods and services to communities and organizations operating in the shadow of the school" (p. 197). Schools, which are now almost completely consumers of goods, are to be restructured by the micro-society approach to become producers of goods and services as well.

Through such experiences, the students are expected to learn the knowledge and skills necessary to eventually move out and become contributing members of their own community.

To facilitate this transition into the real-life community, Richmond suggests that the detached, somewhat protected form of society that is created in the earlier stages of schooling gradually give way to actual participation in the larger society outside the school at later stages. The emphasis at the secondary level would shift from building a micro-society in school, to "building society from school" (p. 220). He suggests that students could become involved in numerous economic enterprises, some that they would operate (e.g., newspapers, day-care centers, stores, theaters), and others that they would affiliate with, as managers, employees, or researchers. In addition, secondary students could become involved in social development activities, such as "preserving and revitalizing the history, traditions, and other cultural patterns of the locale," or "developing personal, community, and institutional ways to cope with social deviance" (p. 222-23). He sees the micro-society school as having the potential, therefore, not only to prepare students for life in society as it is, but to prepare them to serve as agents of social change. One of the premises on which the model is built is that "children who create a society of their own in school, need reach only a few steps beyond—possibly only to secondary school—and only a few inches inward to appropriate the power to transform themselves and their immediate environment" (p. 190).

To the extent that the micro-society approach can achieve a restructuring of the schooling environment and create a realistic microcosm of society, it has the potential to overcome many of the inadequacies of the existing school system for cultural minorities. Such a task will not be accomplished, however, unless the students' educational experiences encompass the full range of situations and conditions they will encounter as minority persons in the real world. It is when the students get out into the surrounding community, therefore, that they will learn the critical survival and action-oriented skills they will need to gain control over their future in the larger society.

Richmond's design for moving students into the community at the secondary level brings us to the third approach to the linking of school and community experiences, that of the "school without walls," which combines features of both nonformal education and the micro-society school.

The "school without walls":
One of the most widely publicized approaches to the merging of school and community has been the Philadelphia Parkway Program, otherwise known as the "school without walls." As originally designed by John Bremer, the program was literally without boundaries—physical or educational. Instead of placing students in formal classrooms, the program operated in and around the social, political, and economic institutions along a parkway in the city of Philadelphia. Instead of following a formally structured academic curriculum, the program was designed to engage students and teachers in a continuous process of creating their own curriculum, within the framework of school district requirements. Bremer summarized the program as follows in a recruitment letter to potential students:

> The Parkway Program will not be a school with classroom or bells. The organizations around the Benjamin Franklin Parkway will provide laboratories, libraries, and meeting space. Although participation will only be required for the length of the normal school year, study and work programs will be available year-round. Students and faculty will form small groups for discussion, study, counseling, and self-evaluation. Learning situations will vary from films, jobs, and lectures to special projects (Bremer and von Moschzisner, 1971: 281).

Students primary participation in the program was through membership in tutorial groups, consisting of a faculty member, a university intern, and fifteen other students. It was in the context of the tutorial groups that students worked out their program activities and acquired the basic skills in language and mathematics required to work in the participating institutions along the Parkway. The program combined formal courses with work programs in civic institutions, social agencies, and local industries and businesses. Some courses were taught by program staff, while others were taught by members of the participating institutions. In addition, students were directly involved in the management of the Parkway Program itself, through membership in "management groups" and participation in "town meetings." Such involvements were designed to afford the students maximum opportunity to learn and acquire management, organizational, and human relations skills, while contributing to the functional needs of an ongoing program. As Bremer saw it, the whole program was to be the curriculum and, therefore, not only content, but structure and method as well, were to be built around the learning needs of the students. "It is a learning community, and the problem is to provide internal structuring or grouping in such a way as to promote learning, not hamper it or simply be irrelevant to it" (p. 23). Thus, there were not artificial, formal age or grade distinctions. Secondary level students sometimes worked side-by-side with elementary level students. Students participated, according to interest and ability, in all aspects of the program. They learned from each other as well as from their "teachers" and the surrounding community.

Since the program was not housed in a conventional school building, facilities such as abandoned warehouses, offices and schools along the Parkway were used for meeting places and to store materials and resources. Students and teachers met on a flexible schedule for various learning activities, depending on outside involvements and individual or group needs. Teachers served as tutors and counselors, and supervised student activities with cooperating agencies and institutions in the community. The purpose of the program was to provide means for the students to learn in the community, rather than about the community, so the emphasis was on active participation in real-life enterprises, and coping with the many, varied and complex aspects of society. Through such participation and coping, students learned "to reflect on, to understand, and to control more effectively their own lives" (p. 292).

Learning was not to be restricted to society as it is, however. From Bremer's point of view the Parkway Program had two challenges: "how to help the student to live learningly within his present life space, and, second, how to expand this life space" (p. 291). To meet these challenges, Bremer sought to change the social organization of education to bring the roles and relationships embodied in the pursuit of formal learning in line with those extant in the surrounding community, where such learning must ultimately be put to use if it is to be of any value. And it is in this context that the Parkway Program provides a useful model for minority education. By moving learning activities into the real-life environment of the community, the detached and artificial nature of traditional schooling is avoided and natural situational frames are provided, within which students can acquire the process and subject-matter skills necessary to function in whatever roles they choose as adults.

The "school without walls" provides a well-articulated and comprehensive model for accommodating schooling to the cultural and situational patterns of a particular community. The Parkway Program was not without its problems in its evolution as a new form of institution, however, and consequently, it underwent some structural revision following the departure of Bremer as its first director, in an attempt to bring the program more in line with the traditional and predominant educational system with which it was presumed to be competing.

A "school without walls" is indeed a radical departure from conventional educational practice, but the potential and promise that such a departure holds for overcoming existing inadequacies in the formal system of education will not be realized if the program's implementation is not approached in such a way that it can overcome the inertia of the present system and prove its worth over the span of generations. To attempt educational reform of the magnitude required to address the issues that have been raised in this article requires a long-term commitment, and a transcending and wholistic perspective. We cannot expect to significantly alter and improve the ultimate effects of the educational system by tinkering with elements within the system, such as the classroom or the curriculum. We must instead consider the relation of the system itself to the social and cultural environment in which it operates. Only then will we be able to make the kind of long-lasting and significant changes sought by Bremer in his design and creation of the "school without walls."

Social organization of community-based education

The three alternative frameworks for education that we have looked at all have a common concern—to fit formal education processes more closely to the real-life conditions reflected in the surrounding community, that is, to make the community the basis for education. Two ways are available by which this can be accomplished: 1) by moving everyday life into the school; 2) by moving the classroom out into everyday life. The first approach is represented by the micro-society school, and the second by nonformal education and the school without walls. As was indicated earlier, such approaches require major changes in the social organization of the school, particularly in terms of school/community and teacher/student relationships. The greater the departure from traditional school practices, the greater the need to restructure the social organization in which learning is to take place, so that the structure and function of education are compatible. Without such restructuring, and without community-wide understanding of the need for it, any alternative approach to community-based education is likely to be short-lived and of little consequence in the improvement of education. It is necessary, therefore, that we give careful consideration to the implications of community-based education for the social organization of learning and determine its appropriateness for the process-oriented, project-centered approach to minority education we outlined earlier. We will look first at the social and cultural implications of the community as a classroom, and then at the consequences of such an approach for the roles of teacher and student.

Classroom and community:

A basic theme throughout all of the previous discussion has been the need for a closer alignment between schooling and community socialization processes, particularly in minority communities. We have been seeking ways to overcome the detachment of learning from reality, and the cultural biases of the social organization reflected in current school practice. Toward that end we have espoused a process-oriented curriculum set in a project-centered format, steps which in themselves, if implemented in a conventional school context, can go a long way toward opening formal learning to a wider range of cultural experiences. Such steps do not go far enough, however, in adapting schooling to the functional learning system of the minority student. To accomplish this, we must go beyond the framework of the school and look at the real-life environment in which varied cultural and cognitive patterns are expressed, and find ways to adapt formal learning to that environment. We have, therefore, examined various approaches to community-based education as a means to that end.

By using the community as a classroom, we are in a position to use natural situational frames as a means for integrating learning and practice and fitting patterns of formal learning to local patterns of informal learning. Instead of depending on the unique setting of the school to establish a simulated form of learning environment in which to teach subject-matter skills, we can use the natural setting and events of the community to bring students into the flow of real-life experiences where they can acquire more pervasive and useful process skills. Students can interact and communicate with people through responsible participation in the full range of natural community situations that they might encounter as adults, and learn—through observation, reflection and practice—the skills necessary to effectively function in those situations. Through their involvements in the community, the students can serve useful social functions and maintain their cultural identity, while learning how social systems operate and by what forces they are changed. They will then, be in a position to act on the goal of cultural eclecticism and contribute to the continuing evolution of a dynamic social order.

All of the above is of little use to anyone if it cannot be put into a framework that schools and communities can identify as realistically attainable. Obviously, we cannot simply turn students loose in the community without some direction and supportive structure within which to function. That would not be acceptable or helpful to the school, the community, or the students. But neither is the rigid structure of the existing school system acceptable or functional as a means for organizing learning experiences for minority students. Between those two conditions there are unlimited options, however, from which schools and communities can choose to organize learning environments suited to the educational goals they hold for their students.

The option that has been proposed here is the project-centered approach, because it is flexible and adaptable to nearly any situation considered desirable for learning and can accommodate any form of knowledge or skills a community considers important for their children, with a minimum of cultural intrusion. If conditions are such that learning experiences cannot be provided in the community, projects can readily be incorporated into a school-based program as well. But the project approach is particularly well-suited to the education of minority students in a community setting, because it engenders widespread interaction between school and community participants, and thus, provides built-in mechanisms for community influence on the direction and form of learning. In addition, projects can be designed around natural patterns of interaction and groupings of persons, while addressing actual tasks and problems in a minority or a majority setting.

Combining projects with community-based education provides a powerful alternative to conventional schooling. It shifts control of education into the hands of the community and it opens up opportunities for meaningful learning experiences to a broader sector of the population. Instead of imposing externally derived categories of learning on students, the categories are derived from the natural conditions surrounding the student's daily life experiences. Project activities are flexibly structured to allow students to fit the learning to their individual learning styles, needs and abilities, and to community values, norms and cultural practices with a minimum of discontinuity. Educational performance is judged by task-oriented standards, rather than test scores, thus reducing the discrepancy between ideal and real. The vast diversity of situational and cultural conditions extant in any community is accommodated, therefore, by an organizational structure that is supportive of the differences, but still provides a means for the development of equivalence structures by which productive interaction and social order can be achieved.

The success of any attempt at a project-centered, community-based approach to education is highly dependent, as is any educational endeavor, on the orientation of the persons involved in its implementations. The critical persons in formal educational processes are the students and the teacher, so it is to an examination of the consequences of our approach for their roles and relationships that we turn next. Without appropriately oriented and prepared teachers and students, we cannot expect any alternative approach, no matter how well conceived, to go very far in practice.

Teacher and student:
The adaptation of formal education to a project-centered, community-based format can have a dramatic effect on the traditional roles of teacher and student. In general, the power and authority for the control of learning is substantially shifted from the teacher to the students and community. The source of skills and understanding is lodged in the setting, rather than the person of the teacher. Any situation, person or event is a potential source for learning, and the student has considerable latitude in defining the nature of that learning. Through their direct participation in the educational process, community members can acquire the power to influence the direction of learning. Learning can become a two-way process, whereby students learn through the activities organized by teachers, and teachers learn through their active involvements with students in the community. It is through this two-way flow of learning, that educational experiences can be made meaningful and adapted to changing conditions. In a community-based approach, the teachers employ their process skills to assist students in acquiring similar skills of their own, through joint exploration of the real-life opportunities available in the surrounding natural physical and social environment. Students are able to engage in projects that bring them together in natural groupings related to the requirements of the task and needs and interests of the learner, rather than artificial grouping by age-grade or test scores. Attention can be paid to the processes by which students function as a group, so that they can learn from each other as well as from the learning activity itself. Through such group experience, students are able to build and solidify their own identities, and acquire the skills and attitudes necessary to function as contributing members of other social groups. Students are able to develop their individuality through the natural processes of group interaction. Thus, the social group takes on a greater responsibility in the shaping of learning experiences in a community-based approach to education. The student serves as teacher as well as learner, through participation in a group process of educational and social development. While such processes occur naturally in a community setting, they are often thwarted by the one-way flow of experience reflected in the conventional social organization of the school.

Along with the student role, the role of "teacher" changes too, from that of transmitter of knowledge and skills, to that of organizer of learning activities. Instead of doing things to students, the teacher works with students, as a tutor, counselor, facilitator and supervisor, in the development and carrying out of learning projects. The teacher's role is to organize community resources into productive learning experiences contributory to student needs, rather than serving as the only source for such learning. Those learning needs that cannot be met in the community context can then be provided through more formalized means, with the teacher working with the students as a resource person in developing the knowledge and skills necessary to carry out particular responsibilities in the community. Only at the advanced stages of schooling, for those students who wish to pursue avenues of interest that cannot be tied to experience or where the opportunities for experience are not readily available, is it necessary to pursue a detached form of learning. Below university level work, such instances need be few in number, given adequately prepared, experientially-oriented teachers.

Since a community-based approach involves the teacher more directly in community activities and fosters more personalized involvement with the students, it is necessary to distinguish between the roles of local community members vs. non-community members as teachers in such an approach, particularly in the context of a minority community. A minority teacher from the same cultural background as the student is in a position to establish a much more productive relationship with that student than a non-minority (or other-minority) teacher (cf., Barnhardt, 1974). The minority teacher, as a representative of the student's culture, is able to identify with and directly relate to the cultural patterns indigenous to the community and the student, and thus avoid many of the conflicts and discontinuities associated with schooling for minority students. Because of the similarity in communication and interaction patterns, the minority teacher does not have to go through the process of building appropriate situational frames and establishing equivalence structures to engage in productive interaction with the minority students. These are inherent in the relationship. This can be particularly helpful in the early years of schooling, when the students are especially vulnerable to discontinuities in educational experience. The minority teacher can provide continuity in the student's transition from informal to formal learning, and thus reduce the chances of the student developing a negative, dysfunctional stance toward learning.

The opportunity for a minority teacher to serve the positive functions outlined above is predicated on two conditions, however: 1) that prior experiences, particularly while in training, have not impeded the indigenous characteristics necessary to function effectively in the cultural minority setting; and 2) that the schooling environment itself is open to the establishment of alternative roles and relationships. The first condition is sometimes lacking because of the attitudinal and behavioral changes that often accompany four years of university experience. This can become a serious problem if the teacher training program inculcates a structured form of teaching behavior that is incompatible with the indigenous patterns of behavior and interaction in the minority community. The minority teacher with such training will be placed in the untenable position of having to resolve two conflicting modes of interaction—one in the school, and one in the community. The implications of this problem for teacher training are obviously numerous.

The second condition—the flexibility of the schooling environment—is of even greater importance than the first, because the appropriate teaching environment can oftentimes overcome the inadequacies of the training, whereas the reverse is more difficult. A minority teacher in a minority school setting can greatly improve the quality of the educational experiences in that setting, both as a role model and as an effective interactant. This is assuming, however, that the improvement of conventional school experiences is in the student's best interest. If such experiences are oriented, implicitly or explicitly, toward assimilation, the minority teacher might become a vehicle to enhance the goals of the school, rather than the goals of the minority community. Such issues must be dealt with at a situational level, because the goals of education will vary from one context to another, and individual teachers will be supportive of different goals for themselves.

The most effective use of a minority teacher occurs when the goal is cultural eclecticism, and education is community-based. Under such conditions, the minority teacher is uniquely equipped to maximize the opportunities for learning to occur in a cumulative and integrative manner. The teacher and students can adapt themselves to the surrounding conditions and carry on fruitful interaction in all dimensions of community and educational experiences. The minority teacher serves as a natural extension of the community into the educational domain of the minority students.

The teacher from outside the minority community is in a different position in relation to students from that community. The outside teacher must recognize that there is no universal form of teaching practice or method that will achieve comparable results in any cultural setting. Each situation is unique, and teaching behavior that may be appropriate in one situation may be quite inappropriate in another. An outsider coming into a new minority setting must, therefore, expect to spend a considerable amount of time (a year or more) just getting his/her bearings in the local cultural scene. Only after s/he has acquired a familiarity with local patterns of communication and interaction, can s/he expect to contribute much more than limited factual knowledge and skills to that scene. If properly oriented and placed, however, the outside teacher can be an important contributor to minority education. As a representative of the larger society (usually), the outside teacher can provide the exposure to outside experiences that is implied in the goal of cultural eclecticism. The crucial factor is the attitude reflected by such a teacher in providing that exposure. If the teacher takes a holier-than-thou position and presents the larger world in a detached context and in a glorified manner that implies "this is the only way to go," s/he will be of little value to the minority student. If, on the other hand, s/he works with the students in a community context with the intent of involving them in various larger-society experiences to help them understand and cope with alternative situations they may encounter as adults, then s/he is in a position to make a valuable contribution.

Outside teachers can be most useful at the upper levels, as students begin branching out into new situations and alternative avenues of interests from those indigenous to the minority community. If the students are to learn to function in a complex, multicultural society, then it is helpful for them to have multi-cultural experiences in the course of their education, provided the external cultural influences do not unfairly predominate in those experiences. A balance of minority and non-minority teachers operating in a community context provides one means by which this can be accomplished.

We have seen, then, that community-based education calls for major revisions in the social organization of the school. The school becomes more closely integrated with the cultural patterns of the community, and the teacher and student roles are opened up to a form of shared experiential development that has the potential for transcending cultural boundaries and bringing education into the realm of cultural eclecticism. It is that experiential focus that is at the heart of a cross-cultural approach, so it is to the relation between culture and experiential learning that we turn now to draw together the threads that have been interspersed throughout the preceding discussion.

Culture and experiential learning

In exploring the various approaches to goals, content, and structure in minority education, we have worked our way through, in each dimension, to an approach that is dependent on some form of experiential learning. Cultural eclecticism as a goal, depends on each person having the range of experiences necessary to make realistic choices in life style and cultural commitments. A process-oriented curriculum is dependent on opportunities for the experiential development of the requisite process skills. And the project-centered, community-based structure is designed to organize learning activities in the context of real-life experiences. The "experiential learning" reflected in all these dimensions of our approach, serves then, as our educational "method."

Experiential learning is more than the "learning by doing," "discovery" or "inquiry" methods that are sometimes espoused by educators. These methods, while indicative of the value of having students "work it out for themselves," are usually employed within the context of formally structured learning activities, stopping short of the direct involvement in real-life experiences called for here. Experiential learning is more akin to the "walkabout" approach suggested by Gibbons (1974) as a means for facilitating students' transition from childhood to adult roles during the last years of formal schooling. Drawing on the Australian Aborigine practice of sending out their young to survive alone in the wilderness for an extended period as a "rite of passage" (cf., van Gennep, 1960), into adulthood, Gibbons proposes a comparable experience for American high school students. He contrasts a conventional high school experience with features of the "walkabout" as follows:

> The young native faces a severe but extremely appropriate trial, one in which he must demonstrate the knowledge and skills necessary to make him a contributor to the tribe rather than a drain on its meager resources. By contrast, the young North American is faced with written examinations that test skills very far removed from the actual experience he will have in real life. He writes; he does not act. He solves familiar theoretical problems; he does not apply what he knows in strange but real situations. He is under direction in a protected environment to the end; he does not go out into the world to demonstrate that he is prepared to survive in, and contribute to, our society. His preparation is primarily for the mastery of content and skills in the disciplines and has little to do with reaching maturity, achieving adulthood, or developing fully as a person (p. 597).

As a means of pulling school experiences together and making them contributory to passage into the adult world, Gibbons proposes a modified form of the walkabout as a kind of culminating trial experience preparatory to graduation. A principal feature of the walkabout program is that "it should be experiential and the experience should be real rather than simulated" (p. 598). He indicates that it should also involve "personal challenge, individual and group decision making, self-direction in the pursuit of goals, real-world significance in activity, and community involvement at all stages of preparation and conclusion" (p. 600).

In practice, Gibbons' walkabout experiences would address five "challenge categories:" adventure, creativity, service, practical skill, and logical inquiry. Students would be required to select and carry out a major project in each category. Gibbons provides numerous examples of potential walkabout projects, such as a month-long expedition in a wilderness area, producing an original film, volunteer work with the elderly, operating a home appliance repair service, and researching questions such as "What ways can the power output of an engine be most economically increased" (p. 599). Just prior to graduation, the students would present formal reports to community and school members, summarizing the results of their walkabout experiences.

The walkabout, in its theory, design and practice, is a prime example of experiential learning. Students learn through direct involvement in the physical and cultural environment around them. Such an approach does not have to be limited, however, to the culminating years of school experience. It can be readily adapted to any level and to cover many aspects of the curriculum. It offers one more way to more closely align formal schooling with community socialization processes.

The experiential approach to learning outlined here reflects many of the characteristics associated with informal education. It provides for a more particularistic orientation in the organization of social relations, thus allowing critical identity and value formation processes to develop freely in a natural community context. Students and teachers are able to maintain personalized relationships and establish an informal atmosphere of mutual respect and trust. The content and processes of learning are focused on actual, real-life phenomena, with an emphasis on observation, action and participation as a means of acquiring an understanding of those phenomena. There is a continuity between community and school related experiences, with a great deal of flexibility to fit learning to individual needs and circumstances. Much of what is learned is spontaneous and unanticipated, consistent with the loose structure and inductive nature of the learning activities. Finally, learning is evaluated on the basis of conduct and action in the course of carrying out real-life responsibilities within a natural context, rather than on the basis of achievement test scores resulting from the imposition of externally defined criteria set in a detached environment. All of these characteristics serve to indicate the appropriateness of an experiential learning approach for adapting formal education to the varied cultural and situational conditions in minority communities.

An implicit function of experiential learning, as reflected in the educational approach outlined in this discussion, is to provide a means by which students can test themselves and the world around them, through a process of critical involvement and exploration in that world. This process is comparable to Freire's (1971) notion of "praxis"—a testing of theory through practice. Students confront and eventually learn to modify and improve their social reality through the experience gained from direct participation in that reality. This development of a critical social consciousness is a by-product of experiential learning that makes it especially suitable in a minority setting, where an understanding of the processes that shape social reality can provide a major step in gaining control over the future of that reality. If cultural minorities desire educational opportunities that will prepare them to extend beyond the boundaries of their present existence, they will need to overcome the experiential limitations of the traditional educational system. That system, with its detachment from real-life experience, is not capable of perpetuating the minority culture, nor is it capable of transmitting any more than superficial aspects of the majority culture. It is only through direct experience that a critical understanding of basic cultural processes and thus, self-determination, can be achieved. As Wallace (1970: 109) has indicated in reference to processes of cultural transmission in general, "The best a culture can do is communicate the general framework of 'its' plans and ensure that the new generation is placed in situations in which they will have to reinvent the details, probably with minor modifications." The provision of such situations becomes all the more critical when the circumstances include varying conditions of acculturation, as in minority settings.

Experiential learning, as applied in the cross-cultural approach to education outlined here, is intended to serve as a means to address cultural processes, rather than cultural content. The specific cultural patterns reflected in a particular community serve as a means to gain an understanding of the more general processes by which culture defines the nature of our existence, and by which culture changes as a result of human interaction. The justification for the approach outlined here is aptly summarized by Hall (1976: 165) in the following statement "Without first mastering culture's unwritten rules, we cannot escape the binding constraints on knowledge of our species which can be seen in all situations and contexts and can be observed wherever human beings interact. Where does one begin such an inquiry?" We might begin by looking at ourselves and the processes by which we come to understand and shape the world around us. We may then find ways to build educational programs that contribute to the multiple and diverse needs of all the people, rather than a select few.

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THE DEVELOPMENT OF AN INTEGRATED BILINGUAL AND CROSS-CULTURAL CURRICULUM IN AN ARCTIC SCHOOL DISTRICT

by
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This article was originally presented at the First Congress on Education, of the Canadian School Trustees Association, in Toronto, Canada, June 21, 1978. The reader is asked to keep in mind that the conditions and processes described in the article were those of the school district in 1978, and do not necessarily apply today.

If indeed, there is a formula for developing an integrated bilingual and cross-cultural curriculum, experience in the Northwest Arctic School District would suggest the following key elements of the development process:

> Basing the curriculum on the rapidly changing social context, rather than on stereotyped bicultural (dual society) concepts.
>
> Ensuring local control of educational policy.
>
> Treating the whole school curriculum, rather than separating language and cultural concerns off in a fragment of the curriculum.
>
> Being honest, and keeping curriculum processes clear and simple—developing simple educational goals and then achieving them.
>
> Developing school-community unity by keeping advisory channels open.

The Northwest Arctic School District operates eleven schools in a 36,000 square mile region north of the Arctic Circle. It is an Inupiat Eskimo region, but Inupiaq language has declined in use. The district has set goals for students in relation to basic skills, life skills and cross-cultural skills and is pursuing a curriculum development process which incorporates staff development, community development and program development.

In this paper, some of the problems and processes that have occurred in the development of a community-based curriculum are discussed. An example of the integrated approach is given, and issues regarding the legal and funding structures are explored. Finally, some modest guidelines for the development of an integrated bilingual and cross-cultural curriculum are offered.

PROBLEMS AND PROCESSES

School/Community Dissonance: Local Control

> "Long ago when they built a Council House they built them for a happy gathering place. They gather together for happy occasions such as dancing, Eskimo games and feasts. They used the Council House for teaching Eskimo way of living."
>
> "There were no set teachers."
>
> "Eskimos are smart. They learn a person's word of advice."
>
> "We were there in the time when there was silence ...the time when Eskimo way of living was like a still water now has become bad like waves pounding."
>
> "And these young people our children are living in the white man's way and have become a part of them. They have become that way and there are no Council Houses."
>
> "The government is giving the education to our children today. The information we have told on the Eskimo culture will be studied by our grandchildren in the school."

Education in a mass society is subversive and assimilative, especially in cross-cultural situations. The strain, or dissonance, between school and rural communities in the arctic stems in part from the vast differences between traditional Eskimo learning and "school learning", as described above by the elders. In traditional Eskimo society children learned by watching silently, and following the lead of their elders. Twenty-thousand years of experience in the arctic environment comprised a sound basis for the cultural content and educational methods of traditional Eskimo society. But encroachment of the technological society on rural Alaska has created an upheaval in Eskimo society, which is characterized in the schools by a doctrinaire school curriculum unrelated to the life experience of the people.

Prior to the establishment of local control of education, the curriculum in rural Alaska was nothing more than a transplanted program such as could be found in any school in the lower forty-eight states. The traditions, values and beliefs of the dominant white middle and upper classes were those primarily reflected in the school curriculum, and Eskimo children were discouraged from using their Inupiaq language in the school. There was no organized course of studies about the State of Alaska, nor any attention to Native Studies, and three successive generations of language suppression had all but eliminated the Inupiaq language. Today, only the older people are truly fluent, and most entering school children are not speakers at all.

Local control in rural Alaska has its roots in the Alaska Native Claims Settlement Act which created regional Native Associations to hold the Native lands and payments ceded to Native Alaskans in the act. The Northwest Alaska Native Association (NANA) became the holder of lands in the Northwest Region, which encompasses the Kobuk, Noatak and Selawik River Valleys, and the coastal lands between Deering and Kivalina—traditional lands of the Inupiat people. NANA later divided into a profit making corporation (NANA Regional Corporation) and a non-profit association (Mauneluk Association). Local control of the land stimulated the movement for local control of education.

Until 1975 most rural students who wanted to finish high school had to leave their villages to attend schools operated by the Bureau of Indian Affairs or the State of Alaska. For Northwest Arctic students, this meant traveling as far away as Sitka or even the lower forty-eight. Native Alaskan boarding students rarely got home to see their families, and had little in common with other students. During the time they were away at school, they were removed from village life, and were not learning the traditional skills important for survival in the arctic. Needless to say, there were very few high school graduates among Alaska Natives.

In 1973 a group of rural Alaskan students (Molly Hootch, et al) brought a class action suit against the State of Alaska, charging discrimination in the State's failure to provide a secondary education such that students could live at home while attending school. The Hootch case was settled out of court in 1976 (Tobeluk Consent Decree), where it was agreed that Native boarding high schools were not an equal educational opportunity compared to the local high schools attended by most white Alaskans. At the same time, the Alaska Unorganized Borough Schools (formerly, State Operated School System) was divided into 21 Rural Educational Attendance Areas (REAA's) to operate elementary and secondary schools in rural regions.

The Northwest Arctic School District is the REAA which encompasses the Inupiat Eskimo lands of the Northwest or NANA Region. The District has an eleven member Regional School Board which is elected at large by the people of the region and establishes district-wide educational policy. Each of the eleven village schools in the District has a Community School Committee which governs local school affairs.

In its first year of operation, the Northwest Arctic School District brought the two remaining Bureau of Indian Affairs schools into the District and began establishing secondary school programs in the villages of the region. The School District now offers high school education in all of the villages and education is governed by elected representatives of the people.

The fortuitous chain of events which has brought local political and economic, and now educational control to rural Alaska has done much to eliminate the dissonance between school and community in the Northwest Arctic. Where school policy is made by the parents of the school children a community commitment to education develops. When imposed from outside, what might have been the same prescription has failed repeatedly.

Thus, one antecedent to the reduction of linguistic and cultural barriers in rural school programs is the recognition that language and culture are but two of a number of social forces affecting the lives of rural arctic people. Researchers in culture and education have long been aware of the systematic disenfranchisement of minority cultural ways in the educational system of the United States Among all minority groups, Native Americans have fared the least well in the traditional educational system, and the Northwest Arctic has been no exception.

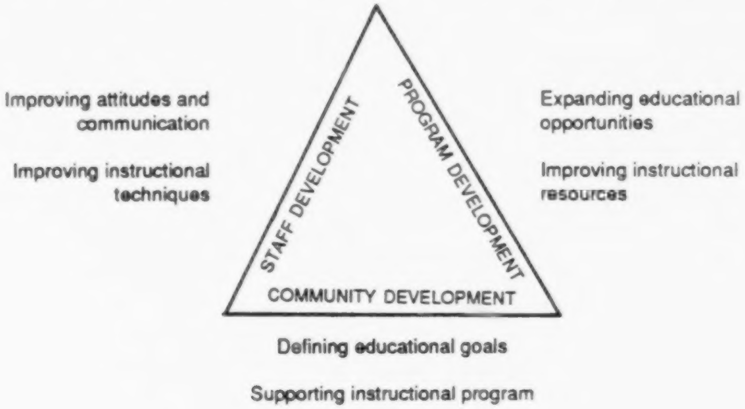
Today, the most distinguishing feature of life in the Northwest Arctic is not language, culture, politics or economics, per se, but a combination of all of these in rapid change. Inupiat people exhibit as many and varied lifestyles as do people anywhere in America, from completely traditional to thoroughly modern. In times of rapid change, the extent to which a group of people can gain control over the political and economic forces in their lives is the extent to which the educational system can be adapted to meet their changing linguistic and cultural needs.

Approach to Curriculum

In recognition of the blatant disenfranchisement of Inupiat people under previous school administrations, the Northwest Arctic School District has been pursuing a community-based curriculum development process. This process necessitates a reversal of the former assimilative role of the schools, making them reflective of the changing social structure, allowing latitude for diversity of cultural values in the school curriculum, and, in the case of the Northwest Arctic, fostering a revival of the Inupiaq language.

A community based curriculum development process is a whole-system process. This requires a three faceted approach to curriculum development in which staff development, community development and program development are all included in the process. Most educators treat only the school program (plans, textbooks, learning experiences) in attempting to solve curriculum problems. In the Northwest Arctic, we assume that no curricular change can actually take place unless the community wants it and supports it, and unless the staff has the necessary motivation and expertise. The diagram below depicts the relationship between staff, program and community development in the curriculum development process of the Northwest Arctic School District.

The Relationship Between Staff, Program and Community Development

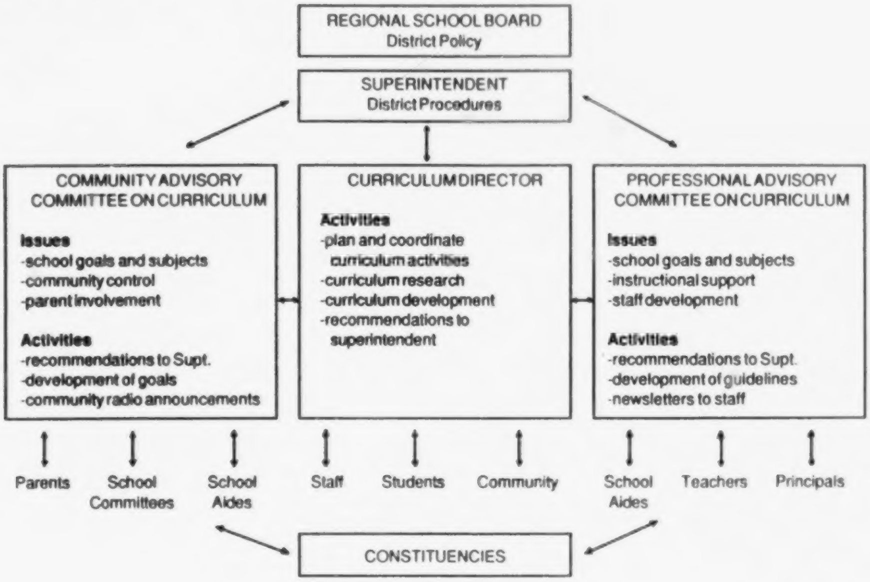

Improving attitudes and communication
Improving instructional techniques
STAFF DEVELOPMENT
PROGRAM DEVELOPMENT
Expanding educational opportunities
Improving instructional resources
COMMUNITY DEVELOPMENT
Defining educational goals
Supporting instructional program

At the same time, the Northwest Arctic School District has not adopted the bilingual/bicultural approach to curriculum development, because of the static view of culture embodied in the approach, and because the district's students are not bilingual, but rather are becoming bilingual. In the past, bilingual/bicultural distinctions have served to aggravate the students' feeling of anomie by presenting them with the ludicrous choice of becoming a "real Eskimo", such as their grandparents were, or becoming a "white man", neither of which was available to them in reality. The Northwest Arctic School District takes the view that there are not two separate societies (as implied by the bilingual/bicultural approach), but rather that there is a viable modern-day Inupiat culture and language which has been ignored in the school curriculum. Thus, the district is attempting to develop an integrated curriculum based on the individual and combined needs of Inupiat students in a rapidly changing social and economic structure. In this integrated curriculum, Inupiat language and culture will not be treated separately, but incorporated through the whole school program, and reflected in staffing patterns and community relations as well.

The integrated approach to curriculum development, then, is characterized by a process of defining the schooling situation as it is seen from the point of view of the people of the Northwest Arctic, rather than as defined by educators and officials elsewhere.

To operationalize this process of curriculum development based on individual and combined student needs, the District has initiated a number of concurrent activities to promote program development, staff development and community development, with the aim of instituting an integrated and excellent curriculum in the schools, a curriculum which has the necessary support of the community and to which can be brought the professional expertise necessary for success.

The district maintains two advisory committees on curriculum and employs a curriculum director, who coordinates the curriculum development function in the district. One advisory committee is made up of professional school staff members (teachers, principals and aides), and the other is made up of community members (parents, community school committee members, and school aides). Each advisory group has its own unique perspective on curriculum development in the district and different roles have emerged for each group, as shown on the following diagram.


REGIONAL SCHOOL BOARD
District Policy
SUPERINTENDENT
District Procedures
COMMUNITY ADVISORY COMMITTEE ON CURRICULUM
Issues
-school goals and subjects
-community control
-parent involvement
Activities
-recommendations to Supt.
-development of goals
-community radio announcements
CURRICULUM DIRECTOR
Activities
-plan and coordinate curriculum activities
-curriculum research
-curriculum development
-recommendations to superintendent
PROFESSIONAL ADVISORY COMMITTEE ON CURRICULUM
Issues
-school goals and subjects
-instructional support
-staff development
Activities
-recommendations to Supt.
-development of guidelines
-newsletters to staff
Parents
School Committees
School Aides
Staff
Students
Community
School Aides
Teachers
Principals
CONSTITUENCIES

As issues in district-wide curriculum development surface, their implications for program, staff and community development are explored. Staff and community involvement in planning for program changes are elicited through the advisory committees, as well as through informal and other organizational networks. Communications are a key to effective integrated curriculum development, with a constant two-way flow of information between school staff and community. It is also important to allow curriculum issues, and thus the curriculum, to emerge from the community and its needs rather than to be prescribed by outsiders. Thus, the emerging roles of the community vis a` vis the school staff in the curriculum development process are those of goal setting versus implementing education to reach those goals.

Such a curriculum development process is time consuming, but ensures the involvement of all groups who have a vested interest in the education of children in the Northwest Arctic. The district has held community meetings and in-service training at each community school for the purpose of identifying needs for curriculum development. Many schools have begun the development of a sequenced program of studies which will result in a planned school curriculum. The superintendent has reorganized the district office program staff in order to provide more direct services to students and schools based on identified needs rather than traditional school roles. Principals have been assigned to most village schools in order to provide more direct on-site educational leadership and ensure continuity of program for students.

As a reward for patience in this time-consuming community-based curriculum development process, the district now has a simple statement of goals, on which there is wide agreement and commitment. The statement was developed and approved unanimously by the two advisory committees on curriculum. It reads as follows:

GOALS OF THE NORTHWEST ARCTIC SCHOOL DISTRICT

The Northwest Arctic Region is in a process of rapid economic, political and social change. The main concerns for schools in this region are:

- Educating children for the many and changing lifestyles they will lead, whether in the village or in the city.
- Developing leadership in every aspect of community life.
- Promoting better cross-cultural understanding and Iñuguliq kamaksriigalikun ("growing up with respect").

The Northwest Arctic School District will strive toward the following *goals for students*:

1. Students will become proficient in the basic skills required for educational and societal success.
2. Students will acquire introductory skills and experience in one or more adult-life roles.
3. Students will develop respect for their cultural heritage and an understanding of themselves as individuals.

The Northwest Arctic School District has the following goals for schools:

1. Schools will involve the community in educational planning, instruction, and evaluation.
2. Schools will encourage community residents to become professional educators.
3. Schools will encourage teachers to enhance their professional qualifications and instructional expertise.
4. Schools will encourage students to take pride in the quality of their work and their personal accomplishments.

These goals were developed through a combined effort of parents, community leaders, and educators. They represent the dreams of the parents for their children as well as a philosophy for educators in the region.

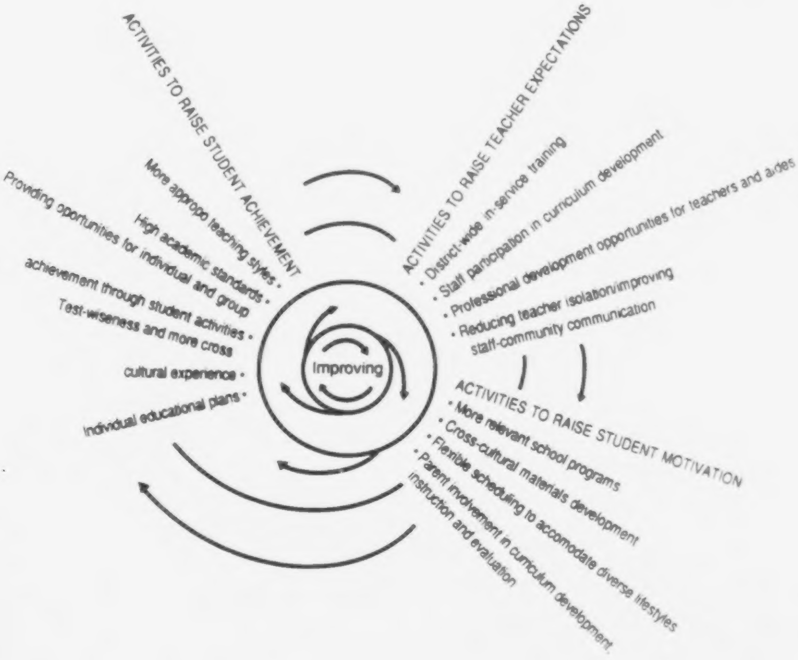
What remains to be done in coming years includes the development of curriculum and evaluation guidelines for reaching these goals. The total district plan of service will probably be built on the foundation of combined individual student program plans as well as a flexible district-wide system of learning opportunities accessible to all students. The age-old rural school problems of high teacher turnover and small school size should diminish in importance as a continuous district-wide program of services based on student needs is implemented.

The Integrated Approach: An Example

The most devastating curriculum problem in the Northwest Arctic School District at this time is not language barriers, or cultural differences, or high teacher turnover, or any of the other myriad of issues which come up in discussions of rural cross-cultural education. The singularly most critical problem now existing in this district, and probably in most rural cross-cultural school systems in the arctic, is a "failure syndrome" typified by a downward cycle of teacher expectations, student motivation and student achievement.

The interrelatedness of these factors is one of the few established relationships in education. For all practical purposes, it makes no difference which of these factors may be causative. In fact, the considerable amount of time spent in trying to place blame on one or another aspect of the school/community is wasted, and probably contributes to the downward spiral. The simple fact is that our students are suffering as a result of this "failure syndrome."

Based on assumptions derived from educational and organizational research, and on the expressed wishes of the people, the Northwest Arctic School District is initiating a coordinated plan of activities designed to address all of these problematic factors at the same time. The idea is that no matter how this downward spiral got started, each of the factors has become problematic and all must be turned around in order to stop the downward spiral. Further, it is assumed that an improvement in any one of the factors will contribute to an improvement in the others. This is the system-wide approach to curriculum improvement in action. Shown in the following diagram are the activities that the district is pursuing as remedies in each of the needed areas of improvement.


ACTIVITIES TO RAISE STUDENT ACHIEVEMENT
More appropo teaching styles •
High academic standards •
Providing oportunities for individual and group achievement through student activities •
Test-wiseness and more cross cultural experience •
Individual educational plans •
ACTIVITIES TO RAISE TEACHER EXPECTATIONS
• District-wide in-service training
• Staff participation in curriculum development
• Professional development opportunities for teachers and aides
• Reducing teacher isolation/improving staff-community communication
ACTIVITIES TO RAISE STUDENT MOTIVATION
• More relevant school programs
• Cross-cultural materials development
• Flexible scheduling to accomodate diverse lifestyles
• Parent involvement in curriculum development, instruction and evaluation
Improving

Elements of program, staff and community development can all be seen in the activities designed to remedy the "failure syndrome" in the Northwest Arctic Schools. If, as the district hopes, the downward spiral of the "failure syndrome" can be stopped and turned into an upward spiral, or a "winning syndrome," then the resolution of other curricular problems will be simplified. When confronted in a positive atmosphere with a winning spirit, problems oftentimes find their own solutions.

An apriori assumption of an integrated curriculum is its basis in the real needs of real children. Not by legal requirement or court order, but at the insistence of the community through their local school board, the Northwest Arctic School District is already moving toward a total plan of educational services based on the cultural, linguistic, academic, vocational, and special needs of students. As a result, in future years, the district hopes to find itself out ahead of the field in bilingual and cross-cultural curriculum development.

GUIDELINES FOR DEVELOPING AN INTEGRATED BILINGUAL AND CROSS-CULTURAL CURRICULUM

To whatever extent the experience of the Northwest Arctic School District can be of value in other rural or cross-cultural situations, a summary of the critical points in the district's curriculum development process is offered here. These points are raised in the form of organizational patterns which have evolved in the school district, and which seem to contribute to a successful curriculum development effort.

Attend to the Changing Nature of Society

To a great extent in the past, schools have had "cultural blind spots" where students are concerned. Under the guise of treating all students equally, minority cultural ways have either been absent or highly stereotyped in the school curriculum.

Local control of education in rural Alaska has done much to counter the "cultural blind spots," and allow the present-day (not the stereotyped) needs and desires of the people to emerge. Necessary in establishing local control of schools are educational leaders who can enter a cross-cultural situation with an open mind, allowing people to be who they are and become what they will.

Treat the Whole Curriculum

In an adequately integrated bilingual and cross-cultural curriculum, the school should reflect the community in every aspect, not just in revised text materials or special ethnic studies programs. Staff readiness, community support, and student motivation are keys to any successful curriculum, regardless of language or culture. Since the Northwest Arctic is an Iñupiat region, the schools should be Iñupiat institutions.

A wide vision of what schools do and can do, attention to the real needs of real children (not stereotyped children), and a positive attitude, can further the development on an integrated bilingual and cross-cultural curriculum.

Be Honest

Centuries of wrongs cannot be righted overnight. But one of the purposes of working to develop a cross-cultural curriculum is to resolve the contradictions, or bridge the gap, between what is said and what is done.

Open channels through which people can be heard are vital to planning as well as to developing community support for school programs. In the case of the Northwest Arctic, the two curriculum advisory committees as well as a number of informal channels are open. Again, regardless of language or culture, people everywhere want to be treated with respect. When the Community Advisory Committee on Curriculum was asked to decide on a name for the district curriculum, they chose Iñuguliq kamaksriigalikun, which means in English, "growing up with respect." Iñuguliq kamaksriigalikun has become the theme of the district's curriculum development efforts.

Being honest means stating things such that others can understand, weigh the consequences, and render their own judgments. The curricular implication is that policies, procedures, guidelines and such should be stated simply and clearly, and time must be taken to explain new ideas.

Being honest means not advertising things that cannot be delivered. In the past, people in rural cross-cultural schools have been promised much more than they ever got. The Northwest Arctic School District is attempting to focus its effort on a small number of clear and attainable educational goals, which are identified as the most pressing by the people themselves.

Be United

The only truly bilingual and cross-cultural curriculum is one in which educators and community are united in their view of what the schools are doing. Patience and compromise are keys to developing cross-cultural unity.

Once wide agreement has been reached on important curricular issues, the combined school staff and school community will be unbeatable in finding solutions to curricular problems. In a like manner, when staff and community stand strong together with a clarity of purpose, interference from outside the district can be minimized.

A Final Note

So the curriculum developers in a bilingual cross-cultural situation need to practice the art of listening; keep an open mind about the curricular imperatives of language and culture; operationalize the expressed desires of the people in the form of a clear, continuous, simply stated, easily understood and workable curriculum; translate and negotiate the important curricular issues among the different interest groups; and be ready to learn much more than expected.

The curriculum in the Northwest Arctic School District is being (and probably should be) developed "from scratch" because of the unique political, economic, social and cultural changes taking place in the region. As can be inferred from this paper, the emphasis is on process and involvement, with a determination to make the products conform with the expressed needs of the people. Programs for staff development, including encouraging Iñupiat teacher-trainees, are being initiated on a district-wide basis. Program planning and fiscal planning are being coordinated in order to unify the diverse district programs toward the end of meeting all students' needs.

All of these processes are woven with the threads of staff development, program development, and community development, on the loom of Iñuguliq kamaksriigalikun. Time will tell if the Northwest Arctic has chosen the right path.

WEAVING CURRICULUM WEBS: THE STRUCTURE OF NONLINEAR CURRICULUM

by
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This article was originally published in *Childhood Education*, March, 1976.

Described in a story by Doris Lessing is a fabulously fertile African garden, "...rich chocolate earth studded with emerald green, frothed with the white of cauliflowers, jeweled with the purple globes of eggplant and the scarlet wealth of tomatoes. Around the fence grew lemons, pawpaws, bananas—shapes of gold and yellow in their patterns of green."* But the garden is a failure for the London woman who planted it. It does not conform to her sense of what a proper English garden should be.

All of us are limited by our background and experiences; we have difficulty in recognizing the value of pieces of the world that are unfamiliar to us. The things we grew up with, what we expect, are understood and appreciated; the strange new sights—whether a garden full of exotic fruits or a classroom full of diverse activities—present problems. No matter how robust and vital the experience, we need to restructure our thinking and our expectations in order to appreciate new events.

Traditional descriptions of curricula are tidy and tended. Usually they are linear: a lesson consists of presenting an idea, learning about it and summing up the relevant concepts. But a curriculum need not be familiar in this way. Consider the following events:

One day Susan, a third-grader, brings a spider to school and shows it to her classmates during class meeting. The teacher and children ask many questions: Where did she find it? How did she catch it? Has she fed it? What does she plan to do with it? The teacher suggest the children build a cage for the spider. What does a spider "home" need? Three children volunteer to go to the school library to get books that will help them learn more about spiders and how they live. Meanwhile two children discuss getting food for the spider and two others consider what the spider should be called. One child recounts the experience of watching a spider spin a web. Before the meeting ends, the teacher makes a list of the questions that have been raised and of some suggested activities. The children list their names beside the activity on which they plan to begin work.

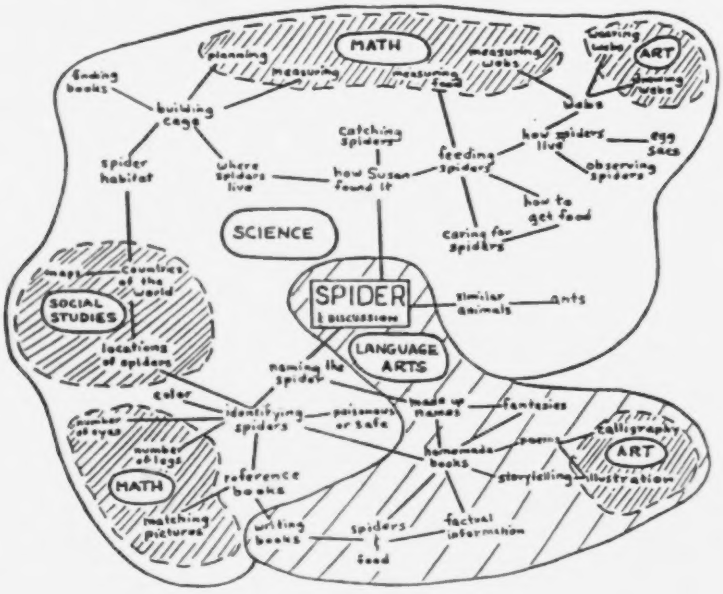
A visitor walking into this room later in the day sees three children sitting near the spider with a book open, trying to identify what kind of spider it is. They are discussing its color, number of legs, eyes, body parts and size. They get a magnifying glass to observe their spider more carefully. On the basis of their reading, they draw several conclusions: "This kind lives only in Africa so it can't be that." "These are poisonous and we know ours is safe." "Ours is too big to be that kind."

Three children get a box, cut out one side and cover it with clear plastic to make a spider house. They discuss how to make air holes so the spider can breathe. One child says she has a piece of fine screening at home and offers to bring it to school. She thinks the holes are small enough so the spider cannot get through, but they will have to check to be sure. Two other children return from the playground where they have gotten a few twigs to put in the box so the spider will have a place to build a web. After a hard search, three others have managed to catch a few bugs to try feeding the spider. They plan to watch to see what happens when they put the bugs in with the spider. The teacher comes over with a homemade book and suggests recording the results so they will know what to catch tomorrow. One writes a title, "What Spiders Eat," on the front.

Two weeks later, when the visitor returns, the spider's home is completed. Matted on construction paper and carefully displayed are two poems about the web the spider has spun. A child has "spun" a web, too, by weaving on a circular loom and has written an account of how difficult it was to make the weaving as well as the spider did its spinning. Other children have made "books," which contain stories they have written and illustrated, including one about a "monster" spider. One book tells about the kinds and quantities of food the spider ate. A chart shows whose turn it is to find food and feed the spider. Someone has written about the size of the web and how long it took to be built. One group has begun collecting ants and has made an ant farm.

The many activities in this classroom do not directly relate to our usual notions of curriculum. How can we keep track of learnings that occur in such an apparent hodge-podge? One way of recording curriculum information is called a flow chart or flow tree . The previously described spider activities might appear as in Figure 1.

Figure 1


MATH
planning
measuring
measuring food
measuring webs
finding books
building cage
weaving webs
ART
drawing webs
webs
catching spiders
how spiders live
egg sacs
spider habitat
where spiders live
how Susan found it
feeding spiders
observing spiders
how to get food
SCIENCE
caring for spiders
maps
countries of the world
SOCIAL STUDIES
locations of spiders
SPIDER
& DISCUSSION
similar animals
ants
LANGUAGE ARTS
naming the spider
color
made up names
fantasies
number of eyes
identifying spiders
poisonous or safe
calligraphy
number of legs
homemade books
poems
ART
MATH
reference books
storytelling
illustration
matching pictures
writing books
spiders & food
factual information

A more formal, traditional approach to a curriculum might, in contrast, present spiders as part of a science unit in a linear way.

SPIDER –CHARACTERISTICS OF SPIDERS –IDENTIFICATION OF SPIDERS –KINDS OF SPIDERS –CLASSIFICATION OF ANIMALS

This more familiar design, starting with an experience intended to lead to a specific goal, represents a totally different approach to curriculum and learning from the detailed example given above. It is helpful to contrast and compare the two ways of organizing.

In a traditional approach to knowledge, problems about the coverage of skills areas do not arise seriously in any theoretical way. The teacher, or curriculum developer, decides what subjects or concepts the class or group is to cover and then arranges the information in what is considered the most appropriate sequence. The experiences illustrate the concepts but do not determine the curriculum.

Informal or "open education" approaches consider the acquisition of skills quite differently. Because there is no predetermined order to and coverage of material, it is often assumed incorrectly that informal education advocates have no concern for skills. Such unstructured classrooms might be a joy for lazy teachers, but they certainly do not reflect a real sense of open education. Teachers who support open education would argue that there are indeed skills they want to impart: they acknowledge the importance of children's learning to read, to compute and to understand the world. But they believe that because individual children learn in a variety of ways, with different children learning different things from the same experience, a new classroom organization and a less linear curriculum are required.

When a teacher surrenders the support of the predetermined structure of knowledge, as reflected in a formal curriculum, he or she takes on the difficult job of developing an overall structure in which children's *individual* paths can flourish through learning activities. Curriculum trees or flow charts are not just nice decorations or a rationale for lack of structure. They are an alternative way of organizing experiences of the world and provide both a guide and a challenge for the teacher.

If we accept the idea that children have individual learning styles and that they go through horizontal and nonlinear growth periods of different intensity and duration, then we must also accept the view that we cannot cut up the day in neat segments and decide what will be learned in each. We need to encourage and facilitate individual children's development. We also need to think about the class as a group and what its needs are, providing for both small- and whole-group activities.

In this new kind of structure, then, Sarah and Johnny are not asked to engage in the same activity minute by minute. Instead, their learnings over periods of weeks and months are the central concern. An open education teacher does not see knowledge as cut up into little bits but does have long-term goals and clear ideas about the child's need to learn through interaction with the world. The teacher can explain the learning taking place during different activities by references to examples of a specific child's work and can also document the learning that has gone on over a period of time.

Interactions with the real world through materials, rather than mediated time chunks, tend therefore to determine curriculum in informal classrooms. This quite radical ("back to roots") idea is, indeed, a restructuring of curricular organization that is different from the "usual." The affluence of the late sixties encouraged many school systems to invest heavily in materials and games, and many classrooms are now equipped with a variety of attractive materials. These materials usually are used only as a supplement to the traditional program, however, rather than as a potentially vital experience in themselves. Often they are employed to entertain the children while the teacher works with one or another group. A philosophical shift is needed. When a teacher better understands the central position of materials in learning and the non-linear nature of learning, then he or she can act on that understanding by becoming familiar with materials and by working with the children through them.

The teacher's role is crucial in structuring the nonlinear curriculum. It involves the ability to respond to children's interests as they arise and to respect their seriousness of purpose by providing for extensions of the immediate learning situation. The teacher in the example of the spider asked specific questions in order to promote discussion skills, provided a framework of plans and activities for children to follow, and helped children decide what they wanted to learn and how to go about it, providing books and materials as needed. She couldn't plan everything in advance but instead supported children's interests and skills, making educated guesses about what would most likely spark children's imagination.

What are the implications of this type of teacher role? What underlies the teacher's image of his or her job? To sum up, such a teacher believes that children learn best:

- Through their individual interests and strengths.
- Through active, concrete experiences with materials and ideas.
- By interdisciplinary synthesis of usual subject areas; not all learning can be broken into boxes or into sequences.
- By experimentation—watching, trying, adjusting, exploring ideas until they "jell."
- Via a wide range of horizontal experiences (those that are at the same competency level). Repetitive though such experiences may seem, once is often not enough for mastery. At the same time, however, the teacher

> provides vertical experiences that may move the child onward in terms of competency level. A balance of these components is sought.

These notions of the teacher's role and their relation to views about children's learning are different from the traditional structure of schools and curriculum. But, like the succulent fruit of the African garden, they represent the product of another tradition; they come from a long history of observing children in action in the real world.

Despite recent talk about "backlash" against open education, thoughtful implementation of informal approaches is beginning to occur throughout the United States and Canada. A number of schools are developing classrooms where slow, steady examination of curriculum decisions is leading to curriculum changes for children. To establish a successful classroom of this kind takes a lot of hard work and also confidence that a different view of curriculum and knowledge can help children to grow and learn. To alter curricula is not enough: rather, the entire view of what things might constitute appropriate support for the nonlinear curriculum must be adjusted—as happened when a spider went to school.

*From African Stories by Doris Lessing.

Artists' Credits

Native Arts Class, grades 9-12, Kathy Harbeson, teacher
McQueen School, Kivalina, Northwest Arctic School District.

Page	Title	Artist
Cover	Two Motion Dancers	Eleanor Swan
5	The Proud Hunter	Marty Norton
9	Eskimo Friends	Eva Hawley
14	The Battle	Tommy Adams Jr.
21	Winter Camping	Carl Barger
24	The New and the Old	Dolly Norton
30	Seal Hunting	Theres C. Barr
35	Curse on the Young & Old	Marty Norton
39	Successful Hunters	Anita Swan
44	Alaskan Wildlife	Janet Swan
49	Bear Fishing	Manly Norton
60	Past and Present	Oral Hawley
64	The Lazy Hunter	Janet Swan
69	Skin Boat with Harpoon and Paddles	Amos Hawley Jr.
73	Caribou	Theres C. Barr
80	Seals	Lizzie Hawley
91	Ice Fishing	Hilda Swan
97	Spirit Dancing	Gina Swan
102	Ware House	Eva Hawley
105	Brotherhood	Mida Swan
110	Close Encounter	Lowell Sage Jr.
114	Walrus Hunter	Hilda Swan
117	Grizzly Bear	Millie Adams I
121	Sea Family	Janet Swan
134	The Hunter	Enoch Adams Jr.
139	Summer Blossoms	Alice Davis

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